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OM nucleic - nucleic search, using sw model

Run on: June 17, 2005, 19:35:47 ; Search time 968.901 Seconds  
(without alignments)  
9904.902 Million cell updates

Title: US-10-051-307-3

Perfect score:

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scoring table: identity\_nuc  
Gapop 10.0 , Gapext 1.0

Searched: 6054689 seqs, 3103772919 residues

Total number of hits satisfying chosen parameters: 12109378

Minimum DB seq length: 0

Minimum DB seq	length: 0
Maximum DB seq	length: 2000000000

Post-processing: Minimum Match 0%

Post-processing: Minimum Match 0%  
Maximum Match 100%

Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications NA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	1545	99.9	1546	13	US-10-051-307-3	Sequence 3, Appli
2	1545	99.9	1546	21	US-10-903-948-3	Sequence 3, Appli
3	1362.4	88.1	1595	13	US-10-051-307-1	Sequence 1, Appli
4	1362.4	88.1	1595	21	US-10-903-948-1	Sequence 1, Appli
5	1334.4	86.3	1598	13	US-10-051-307-2	Sequence 2, Appli
6	1334.4	86.3	1598	21	US-10-903-948-2	Sequence 2, Appli
7	291.2	18.8	510	17	US-10-341-961A-371	Sequence 371, App

RESULT 1  
US-10-051-307-3

US-10-051-307/-3 ; Sequence 3, Application US/10051307  
: Publication No. US20020170095A1

; PUBLICATION NO: US20020170093A1  
 ;  
 ; GENERAL INFORMATION:  
 ;  
 ; APPLICANT: DAI, ZIYU

; AFFILIANT: SHI, LIFANG  
; APPLICANT: SHI, LIFANG

; APPLICANT: HOOKER, BRIAN S

**TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF**

FILE REFERENCE: 059440/0141

FILE REFERENCE: 039440/0141  
CURRENT APPLICATION NUMBER: US/10/051.307

; CURRENT AFFILIATION NUMBER: 09/1  
 : CURRENT FILING DATE: 2002-01-22

; CURRENT FILING DATE: 2002-01-22  
 ; PRIOR APPLICATION NUMBER: 60/263.224

;  
;  
;

NUMBER OF SEO ID NOS: 14

SOFTWARE: PatentIn Ver. 2.1

; SOFTWARE. FACT  
; SEO ID NO 3

; LENGTH: 1546

TYPE: DNA

ORGANISM: Solanum tuberosum

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; CREATIVE:
; FEATURE:

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; NAME/KEY: modified base

LOCATION: (1248)

OTHER INFORMATION: a, t, c or g

US-10-051-307-3

Query Match 99.9%; Score 1545; DB 13; Length 1546;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1546; Conservative 0; Mismatches 0; Indels 0;

c	7	291.2	18.8	510	17	US-10-341-961A-371	Sequence 371. App
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## RESULT 2

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US-10-903-948-3
; Sequence 3, Application US/10903948
; Publication No. US20050005324A1
; GENERAL INFORMATION:
; APPLICANT: DAI, ZIYU
; APPLICANT: SHI, LIFANG
; APPLICANT: HOOKER, BRIAN S.
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF
; FILE REFERENCE: 059440/0141
; CURRENT APPLICATION NUMBER: US/10/903,948
; CURRENT FILING DATE: 2004-07-30
; PRIOR APPLICATION NUMBER: US/10/051,307
; PRIOR FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,224
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 1546
; TYPE: DNA
; ORGANISM: Solanum tuberosum
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1248)
; OTHER INFORMATION: a, t, c or g
US-10-903-948-3
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Query Match 99.9%; Score 1545; DB 21; Length 1546;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1546; Conservative 0; Mismatches 0; Indels 0; Gaps 0.
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## RESULT 3

US-10-051-307-1  
; Sequence 1, Application US/10051307  
; Publication No. US20020170095A1  
; GENERAL INFORMATION:  
; APPLICANT: DAI, ZIYU  
; APPLICANT: SHI, LIFANG  
; APPLICANT: HOOKER, BRIAN S.  
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF  
; FILE REFERENCE: 059440/0141  
; CURRENT APPLICATION NUMBER: US/10/051,307  
; CURRENT FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,224  
; PRIOR FILING DATE: 2001-01-23  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 1595  
; TYPE: DNA  
; ORGANISM: Solanum tuberosum  
US-10-051-307-1

Query Match 88.1%; Score 1362.4; DB 13; Length 1595;  
Best Local Similarity 94.1%; Pred. No. 5.4e-287;  
Matches 1460; Conservative 0; Mismatches 82; Indels 9; Gaps 4;

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Db 289 AATCTAAGTTGTTGAACCTGGTCCGAGCGTACTCGGCTAGGGTGTGTTGGTGGTCC 348  
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Db 1545 TTGCAGATTAATAATGAGGCAAAATAGTCTATGTTGAAGTTGGTTGCTTTC 1595
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## RESULT 4

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US-10-903-948-1
; Sequence 1, Application US/10903948
; Publication No. US20050005324A1
; GENERAL INFORMATION:
; APPLICANT: DAI, ZIYU
; APPLICANT: SHI, LIFANG
; APPLICANT: HOOKER, BRIAN S.
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF
; FILE REFERENCE: 059440/0141
; CURRENT APPLICATION NUMBER: US/10/903,948
; CURRENT FILING DATE: 2004-07-30
; PRIOR APPLICATION NUMBER: US/10/051,307
; PRIOR FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,224
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1595
; TYPE: DNA
; ORGANISM: Solanum tuberosum
US-10-903-948-1
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Query Match 88.1%; Score 1362.4; DB 21; Length 1595;
Best Local Similarity 94.1%; Pred. No. 5.4e-287;
Matches 1460; Conservative 0; Mismatches 82; Indels 9; Gaps 4;
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QY 1 ATCTTTGTTTCGAAAAAATTTGAAAAAGAACGTAGGACCAACATGGACCTTGGGTGCAACAAT 60
Db 49 ATCTTTGTTTCGAAAAAATTTGAAAAAGAACGTAGGACCAACATGGACCTTGGGTGCAACAAT 108
QY 61 ATTTGTGCTCTCCAAATGTGTACAAAGGATTTGTACATFCTTCCGGGTACTTTAAGCTGAC 120
Db 109 ATTTGTGCTCTCCAAATGTGTACAAAGGATTTGTACATFCTTCCGGGTACTTTAAGCTGAC 168
QY 121 TAGCACATTCACATTTATTTTGGCGTGCAATGAAATTCGCTGGCATTTCCCTCCACTTG 180
Db 169 CAGGGCATTCACATTTATTTTCCCGTGCATTTGAATTTGTGTGGCATTTCCCTCCACTTG 228
QY 181 GATTAGTCGGGGCGAAAGTCAATCGGTATATTAAATCCATCAACTAAAGAAATGTCCACAGA 240
Db 229 GATTAGTCGGGGCGAAAGTCAATCGGTATATTAAATCCATCAACTAAAGAAATGTCCACAGA 288
QY 241 AATCTAAGTTGTTGAACTGGTCCGAGGCGTACTCGGCTAGGGTGTGTTGGCGGTTTACCCC 300
Db 289 AATCTAAGTTGTTGAACTGGTCCGAGGCGTACTCGGCTAGGGTGTGTTGGTGGTTTGGCCCC 348
QY 301 ACCGGTGCATCGACGAGCACACCAATCACAGTCATGCAAGAACTCTACACAGCAC 360
Db 349 ACCGGTGCATCGACGAGCACACCAATCACAGTCATGCAAGAACTCTACACAGCAC 408
QY 361 CATCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAGTGCCCTTAGCGCAT 420
Db 409 CATCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAGTGCCCTTAGCGCAT 468
QY 421 CAATGACCCAGTTTGGCTCGATCGAGACGCTCGGCCACCGCCTATCGGGGTTCGATGCTG 480
Db 469 CAATGACCCACATTTGGCCCCGATCGAAACGTCGG-CACCCGCTTTCGGGGTTCGATGCGC 527
QY 481 CCCAGACGCGTGTATGGAACAGTTTGTGGCTACTCGATAGTGGCAGCATAAAGTGAAGTCA 540
Db 528 CCCAAACGATGTATGGAACAGTTTGTGGCTACTCGATAGTGGCAGCATAAAGTGAAGTCA 587
QY 541 CAAAGCAGGAGGAGAGAAAACAAAGAGATCTCAAGTAGCCCATGTTTGTGAAATTT 600
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Qy	779	AAATTATTTTATGAATATAGACTATAGTTACAAGTGAACCTTTATTTTGGTGATAACTCGAC	838
Db	828	AAATTATTTTATGAATATAGCCTATAGTTACAAGTTAACTTTATTTGGTGATAACTTTGAC	887
Qy	839	ATATAAACTCTGTATCGTGACGGAACTTTTCTTAAAACTAAATATTAAGACGAGCTATT	898
Db	888	ATAATAACTCTGTAACTGACGGAAATTTTCTTAAAACTAAATATTAAGACGAGCTATT	947
Qy	899	TTAATATTTTTCTGGTGGCCAAAGTTTCTTGACATCTTATCTATGCCCCATTTTTTACTTTTAT	958
Db	948	TTCACTATTTTCTGGTGGCCAAAGTCTCTTGACATCTTATCTATGCCCCATTTTTTACTTTTAT	1007
Qy	959	CGTTCTAGCCCTCTAGGTAGCGGTTTGAAACATAAAAAATCATAAAAATTTGAAAGTAAAAA	1018
Db	1008	CGTTCTAGCCCTCTAGGTAGCGGTTTGAAACATAAAAAATCATAAAAATTTGAAAGTAAAAA	1067
Qy	1019	TTAG--TTTTTTTTTCATATTACTCGTATCGATCATTTGTTAGATCAATGTGGAATATAC	1075
Db	1068	TTAGTTTTTTTTTTCATATTACTCGTATGGATCATTTGTTAGATCAATCTGAAATATAC	1127
Qy	1076	AAATCATCTCGATTTTAAAAATCAATACTATTCTGCATGATGGGAACGCTCATGGTGATTC	1135
Db	1128	AAACCATCTCGATTTTAAAAATCAACCAATCTGCTTAAGTGGGAAGTCTAT--GTGATTC	1186
Qy	1136	GTGACAAGTGTTTGATTTATCTTAAGTCTCGAATGGAGTCAACATTTTTTAGTGCAAATAT	1195
Db	1187	GTGCAAGTGTTTGA--TTATTTCTAGTCTAGATTGGAGTCACACTTTTAGTGCAAATAT	1245
Qy	1196	CTATTAAAGAACCCCTATTGTATGCAAAAGTCAATAAA--TATTTAATATCATNCTTTA	1253
Db	1246	CTATTAAAGAACCCCTATTGTATGCAAAATATCTATTAAAAAGACCCCTATTTCATCTTTA	1305
Qy	1254	TTTATTTTTTACGATCGGAGATGGATACATTTTACTAATTAATAATAAAATTCGAAGGAATTG	1313
Db	1306	TTTTATTTTTTACGATCGGAGCATGGATATATTTACTAATTAATAATAAAATTCGGAGGAATTG	1365
Qy	1314	ATCGACAAGTCATCAAGCTTATCGTTCGATCCACATCCCTTAACGTTAGTATGGCTGCTT	1373
Db	1366	ATCGACAAGTCATCAAGCTTATCGTTCGATCCACATTCAGGATTAACGTTAGTATGGCTGCTT	1425
Qy	1374	TTAGAGAAAAGAGTGGATCATGTATATTTTAGTTTTCCCTTATCTCTCTATAAATATCTAT	1433
Db	1426	TTAGAGAAAAGAGTGGATCATGTATCAATTTAGTTTAAAAAAATATCTCTCTATAAATACCTGT	1485
Qy	1434	ATATACCTCTAAAACTAAATGCATCTTAAACAACATAAACTTAGATTTCTTTAAAGA	1493
Db	1486	CTATCCCTCTTAAACCAATATACATCTTAACACACAATAATAAACTTAGATTTCTTTAAAGA	1545
Qy	1494	AAATTGCAGAAATTAATCGAGGCAAAATAGTCTATGGTGAAGTTGGTTGCTTTC	1546
Db	1546	AAATTGCAGAAATTAATCGAGGCAAAATAGTCTATGGTGAAGTTGGTTGCTTTC	1598

## RESULT 6

US-10-903-948-2  
 ; Sequence 2, Application US/10903948  
 ; Publication No. US2005005324A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: DAI, ZIYU  
 ; APPLICANT: SHI, LIPANG  
 ; APPLICANT: HOOKER, BRIAN S.  
 ; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF  
 ; FILE REFERENCE: 059440/0141  
 ; CURRENT APPLICATION NUMBER: US/10/903,948  
 ; PRIOR FILING DATE: 2004-07-30  
 ; PRIOR APPLICATION NUMBER: US/10/051,307  
 ; PRIOR FILING DATE: 2002-01-22  
 ; PRIOR APPLICATION NUMBER: 60/263,224  
 ; PRIOR FILING DATE: 2001-01-23  
 ; NUMBER OF SEQ ID NOS: 14  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 2  
 ; LENGTH: 1598



Db 475 CTGGGCTCTCAACAGTTTGGACATGTGTCGTTTATGTCGCGGTACATAGTATCCGAT 416  
Qy 163 GGCATTTCCCTCCACTTGGATTAGTCGGGCGAAAGTGCATCGTATATTAATCCATCAA 222  
Db 415 GGCAGTTC-----GAACTAGTTGGGCTAAATCTCCATAGGTATGTTAAATCCATCGA 365  
Qy 223 CTAAGAGAAATGTCAGAGAAATCTAAGTTGTTGAACTGTTCCGAGCGTACTCGGCTAGGG 282  
Db 364 CAAGTGAGATATCGTAGAGTCTAAGTTGTTGAAATGTTGTTCAAAGGCTACTCAGCCACG 305  
Qy 283 TGTTTGGCGTTTACCCACCCGGTGCACTGCAGACACCAACAATCACCAGTCATGC 342  
Db 304 TGTTTGGTGGTGTCTCCAGCCAGTACATTTGGAGTCCACCACTGCAGTCACCAAGTTTGGC 245  
Qy 343 ACGAACCTCTACAGCACCATCGAAGTTTACATCCAGTACGAGCCCATATAGTGCATCG 402  
Db 244 ATCGGCCACGACCTGAGGAGTCAAAAGTTTACAAATGGTCTACCCCAAAATCGTGCATTT 185  
Qy 403 TAGTGGCCCTAGCGCATCAATGACCCACGTTTGGCCTCGATCGAGAGCTCGGCCACCGC 462  
Db 184 TAGTGGCCCGCGACATCTAGCTTCCATGATTGGCCAGCATCTAGACGTGCGGCCACCTC 125  
Qy 463 CTATCGGGTTCGATGCTGCCAGACGGTGTATGGAAGTGTGTCGTTGTCGTTACCTCGATAGTGG 522  
Db 124 C---AGGGCTTGGCGCAGCCACACGGTGTAACTACATTTGGTTTAGGATTTTGAATGTGG 68  
Qy 523 CAGCATAAGTGAAGTCAAAAGCAAGAGGAGGAGAAACAAAGAAAGATCTCAAG 578  
Db 67 CGGCTGTTCGGTGGAGATGAGCAAAAGTGGCGAAATATGAAAGTAGAGACCAAG 12

## RESULT 9

US-09-938-842A-2118/c  
; Sequence 2118, Application US/09938842A  
; Publication No. US20040009476A9  
; GENERAL INFORMATION:  
; APPLICANT: Harper, Jeff  
; APPLICANT: Kreps, Joel  
; APPLICANT: Wang, Xun  
; APPLICANT: Zhu, Tong  
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING  
; FILE REFERENCE: SAME, AND METHODS OF USE  
; CURRENT APPLICATION NUMBER: US/09/938,842A  
; CURRENT FILING DATE: 2001-08-24  
; PRIOR APPLICATION NUMBER: US 60/227,866  
; PRIOR FILING DATE: 2000-08-24  
; PRIOR APPLICATION NUMBER: US 60/264,647  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: US 60/300,111  
; PRIOR FILING DATE: 2001-06-22  
; NUMBER OF SEQ ID NOS: 5379  
; SEQ ID NO 2118  
; LENGTH: 735  
; TYPE: DNA  
; ORGANISM: Arabidopsis thaliana  
US-09-938-842A-2118

Query Match 13.4%; Score 207.2; DB 11; Length 735;  
Best Local Similarity 64.6%; Pred. No. 5.6e-35;  
Matches 346; Conservative 0; Mismatches 178; Indels 12; Gaps 2;  
Qy 43 GACCTTGGGTGCAACAATATTGTTCTCTCCAAATGTGTTACAAAGGATGTTACATCTC 102  
Db 535 GACCGTTGCTACACAGTATTGGTTCGTCGTAATACAGTACACGGTGTGTTGCATCCAC 476  
Qy 103 CGGTACTTTAAGTGTAGTACATTCACCAATTTATTTTCCCGTCGATTAATTTGGT 162  
Db 475 CTGGGGCTCTCAACACGTTTGGACATTTGCGTTTATGTCGCGGTACATAGTATCCGAT 416  
Qy 163 GGCATTTCCCTCCACTTGGATTAGTCGGGCGAAAGTGCATCGTATATTAATCCATCAA 222  
Db 415 GGCAGTTC-----GAACTAGTTGGGCTAAATCTCCATAGGTATGTTAAATCCATCGA 365

Qy 223 CTAAGAGAAATGTCAGAGAAATCTAAGTTGTTGAACTGTTCCGAGCGTACTCGGCTAGGG 282  
Db 364 CAAGTGAGATATCGTAGAGTCTAAGTTGTTGAAATGTTTCAAGCGTACTCAGCCACG 305  
Qy 283 TGTTTGGCGTTTACCCACCCGGTGCACTGCAGSACACCCACCAATCAACAGTCATGC 342  
Db 304 TGTTTGGTGGTGTCTCCAGCCAGTACATTTGGAGTCCACCACTGCAGTCACCAAGTTTGGC 245  
Qy 343 ACGAACCTCTACAGCACCATCGAAGTTTACATCCAGTACGAGCCCATATAGTGCATCG 402  
Db 244 ATCGGCCACGACCTGAGGAGTCAAAAGTTTACAAATGGTCTACCCCAAAATCGTGCATTT 185  
Qy 403 TAGTGGCCCTAGCGCATCAATGACCCACGTTTGGCCTCGATCGAGAGCTCGGCCACCGC 462  
Db 184 TAGTGGCCCGCGACATCTAGCTTCCATGATTGGCCAGCATCTAGACGTGCGGCCACCTC 125  
Qy 463 CTATCGGGTTCGATGCTGCCAGACGGTGTATGGAAGTGTGTCGTTGTCGTTACCTCGATAGTGG 522  
Db 124 C---AGGGCTTGGCGCAGCCACACGGTGTAACTACATTTGGTTTAGGATTTTGAATGTGG 68  
Qy 523 CAGCATAAGTGAAGTCAAAAGCAAGAGGAGGAGAAACAAAGAAAGATCTCAAG 578  
Db 67 CGGCTGTTCGGTGGAGATGAGCAAAAGTGGCGAAATATGAAAGTAGAGACCAAG 12

## RESULT 10

US-09-770-445-334/c  
; Sequence 334, Application US/09770445  
; Patent No. US20020023281A1  
; GENERAL INFORMATION:  
; APPLICANT: Gorlach, Jorn  
; APPLICANT: An, Yong-Qiang  
; APPLICANT: Hamilton, Carol M.  
; APPLICANT: Price, Jennifer L.  
; APPLICANT: Raines, Tracy M.  
; APPLICANT: Yu, Yang  
; APPLICANT: Rameaka, Joshua G.  
; APPLICANT: Page, Amy  
; APPLICANT: Matthew, Abraham V.  
; APPLICANT: Ledford, Brooke L.  
; APPLICANT: Woessner, Jeffrey P.  
; APPLICANT: Haas, William David  
; APPLICANT: Garcia, Carlos A.  
; APPLICANT: Kricker, Maja  
; APPLICANT: Slader, Ted  
; APPLICANT: Davis, Keith R.  
; APPLICANT: Allen, Keith  
; APPLICANT: Hoffman, Neil  
; APPLICANT: Hurbman, Patrick  
; TITLE OF INVENTION: Expressed Sequences of Arabidopsis  
; FILE REFERENCE: 2023US (PARA-012PRV)  
; CURRENT APPLICATION NUMBER: US/09/770,445  
; CURRENT FILING DATE: 2001-01-26  
; PRIOR APPLICATION NUMBER: US 60/178,472  
; PRIOR FILING DATE: 2000-01-27  
; NUMBER OF SEQ ID NOS: 999  
; SOFTWARE: Fast-SEQ for Windows Version 4.0  
; SEQ ID NO 334  
; LENGTH: 950  
; TYPE: DNA  
; ORGANISM: Arabidopsis thaliana  
US-09-770-445-334

Query Match 13.4%; Score 207.2; DB 9; Length 950;  
Best Local Similarity 64.6%; Pred. No. 6.3e-35;  
Matches 346; Conservative 0; Mismatches 178; Indels 12; Gaps 2;  
Qy 43 GACCTTGGGTGCAACAATATTGTTCTCTCCAAATGTGTTACAAAGGATGTTACATCTC 102  
Db 543 GACCGTTGCTACACAGTATTGGTTCGTCGTAATACAGTACACGGTGTGTTGCATCCAC 484



QY 241 AATCTAAGTTGTGAACCTGCTCCGAGGCGTACTCTCGCTAGGCTGTTTGGCGGTTTACCCC 300  
 |||||  
 Db 343 AATCAAGATTGTGAACTGGTTCAAAGCGTACTCGGCCAATGTGTGGTGGGTGACCAT 284  
 |||||  
 QY 301 ACCCGGTGCATCGCAGGACACCAACCAATACCAAGTATGACGAACTCTTACCAAGCAC 360  
 |||||  
 Db 283 AGTTTGGCATTTGGAGGAGACCGTTGCAATCACCGGTCTGACACCTGCTCGCCCAAGAC 224  
 |||||  
 QY 361 CATCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAGTCCCTTAGCGCAT 420  
 |||||  
 Db 223 CATCAAGATTGCAATTGGTTTCGGGCGCATATACGGGCTCTGCTGTGCCAGCTGCGACGG 164  
 |||||  
 QY 421 CAATGACCCACGCTTTGGCCTCGATCGAGACGTCGCGCCACCGCTATCGGGGTGCGTGTG 480  
 |||||  
 Db 163 TTAAGACCCAGTTTGGCTGAGTTAAGTTGTGCGCGCGCACCC---AGCACCGCACCG 107  
 |||||  
 QY 481 CCCAGCGGTGATGACAGTTGTTGCGTACCTCGATAGTGGCAGCATAGTGAAAGTCA 540  
 |||||  
 Db 106 CCCAAACGCTGATGACAGTTGTTTCGAATAGTGAAACACGCGCTGCAATTGGTATAGTGAA 47  
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 QY 541 CAAA 545  
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 Db 46 AAAGA 42

RESULT 13

US-10-636-026-4/c  
 ; Sequence 4, Application US/10636026  
 ; Publication No. US20040111761A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bidnev, Dennis L.  
 ; APPLICANT: Crasta, Oswald R.  
 ; APPLICANT: Duvick, Jon  
 ; APPLICANT: Hu, Xu  
 ; APPLICANT: Lu, Guihua  
 ; TITLE OF INVENTION: Sunflower Anti-Pathogenic Proteins and  
 ; Genes and their Uses  
 ; FILE REFERENCE: 5718-90  
 ; CURRENT APPLICATION NUMBER: US/10/636,026  
 ; CURRENT FILING DATE: 2003-08-07  
 ; PRIOR APPLICATION NUMBER: US/09/589,733C  
 ; PRIOR FILING DATE: 2000-06-08  
 ; PRIOR APPLICATION NUMBER: 60/140,646  
 ; PRIOR FILING DATE: 1999-06-23  
 ; PRIOR APPLICATION NUMBER: 60/162,904  
 ; PRIOR FILING DATE: 1999-11-01  
 ; NUMBER OF SEQ ID NOS: 41  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 4  
 ; LENGTH: 875  
 ; TYPE: DNA  
 ; ORGANISM: Helianthus annuus  
 US-10-636-026-4

Query Match 11.7%; Score 180.6; DB 19; Length 875;  
 Best Local Similarity 60.9%; Pred. No. 3.9e-29;  
 Matches 332; Conservative 0; Mismatches 204; Indels 9; Gaps 2;  
 QY 1 ATCTTTGTTGAAAAAATGGAAAAAGACGTAGGACCCATGGACCTTTGGGTGCAACAAT 60  
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 Db 577 ATCTGCTCTTGAAAAACCTTGATAAATCAGTTGGTCCACAAATTCAGAGTTGCAACAAT 518  
 |||||  
 QY 61 ATGTGTGCTCCCAATGTGTAAGAATGTTATCATCTCTCGGGTACTTTAAGCTGAC 120  
 |||||  
 Db 517 ACTGATCAGTTTGTATACCGGTGCAAGGGTTATTGACCCCGCAGGAGCCCGTAACTCAC 458  
 |||||  
 QY 121 TAGGACATTACCATTTATTTGCGGTGTCATTTGAATTCGGTGGCATTTCCCTCCACTTG 180  
 |||||  
 Db 457 CAGGACATCGGCATTGATATCCGAGTACATGATATCCCGGTGACCC-----AT 404  
 |||||  
 QY 181 GATTAGTCGGGCGAAAGTCAATCGGTATATTAATCCATCACTAAAGAAATGTCCCGAGA 240  
 |||||  
 Db 403 TAGAATTGGGTCTAAACACCATCTCGGCACATTTGAATCCGTCCACAGAGAAATGTCAAAGA 344  
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QY 241 AATCTAAGTTGTGAACCTGCTCCGAGGCGTACTCTCGCTAGGCTGTTTGGCGGTTTACCCC 300  
 |||||  
 Db 343 AATCAAGATTGTGAACTGGTTCAAAGCGTACTCGGCCAATGTGTGGTGGGTGACCAT 284  
 |||||  
 QY 301 ACCCGGTGCATCGCAGGACACCAACCAATACCAAGTATGACGAACTCTTACCAAGCAC 360  
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 Db 283 AGTTTGGCATTTGGAGGAGACCGTTGCAATCACCGGTCTGACACCTGCTCGCCCAAGAC 224  
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 QY 361 CATCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAGTCCCTTAGCGCAT 420  
 |||||  
 Db 223 CATCAAGATTGCAATTGGTTTCGGGCGCATATACGGGCTCTGCTGTGCCAGCTGCGACGG 164  
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 QY 421 CAATGACCCACGTTTGGCCTCGATCGAGACGTCGCGCCACCGCTATCGGGGTGCGTGTG 480  
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 Db 163 TTAAGACCCAGTTTGGCTGAGTTAAGTTGTGCGCGCGCACCC---AGCACCGCACCG 107  
 |||||  
 QY 481 CCCAGCGGTGATGACAGTTGTTGCGTACCTCGATAGTGGCAGCATAGTGAAAGTCA 540  
 |||||  
 Db 106 CCCAAACGCTGATGACAGTTGTTTCGAATAGTGAAACACGCGCTGCAATTGGTATAGTGAA 47  
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 QY 541 CAAA 545  
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 Db 46 AAAGA 42

RESULT 14

US-10-424-599-36321/c  
 ; Sequence 36321, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa Thomas J  
 ; APPLICANT: Kowalic David K  
 ; APPLICANT: Zhou Yihua  
 ; APPLICANT: Cao Yongwei  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
 ; Title of Invention: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(53223)B  
 ; CURRENT APPLICATION NUMBER: US/10/424,599  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 285684  
 ; SEQ ID NO 36321  
 ; LENGTH: 1956  
 ; TYPE: DNA  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; NAME/KEY: unsure  
 ; LOCATION: (1)..(1956)  
 ; OTHER INFORMATION: unsure at all n locations  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_132800C.1  
 US-10-424-599-36321

Query Match 11.1%; Score 171.6; DB 18; Length 1956;  
 Best Local Similarity 59.8%; Pred. No. 5.3e-27;  
 Matches 329; Conservative 0; Mismatches 209; Indels 12; Gaps 2;  
 QY 39 CATGACCTTCGGGTGCAACAATATTTGTTGCTCCAAATGGGTACAAAGGATTGTTACAT 98  
 |||||  
 Db 1290 CTTTGGCCATTGGTGCAGCAATATCTCATTCGTCTTAAACACAGTGCAGGGGTTGTTGCAT 1231  
 |||||  
 QY 99 CCTCGGGTACTTTAAAGCTGACTAGGACATTCACCATTTATATTTGCCGTGCATTTGAATT 158  
 |||||  
 Db 1230 CCCCAGGTGCCCTTAATGGCCCGGCACATGCCCATTTGATATACGCGCTGCACTGAT 1171  
 |||||  
 QY 159 GCGTGGCATTTCCCTCCACTTTGGATTAGTCCGGGCGCAAGTCAATCGGTATTAATCA 218  
 |||||  
 Db 1170 TTGTGACACCCACCG-----TTTAGAGGGTAGAAGTCCATCGGAATGTTGNACCG 1120  
 |||||  
 QY 219 TCAACTAAGAAATGTCCAGAAATCTAAGTTGTTGAACTGGTCCGAGGCGTATCTCGGCT 278  
 |||||  
 Db 1119 TCCACCAAGAGATGTCGTAGAAATCTCGTTTGGCAAAATTTGGTTCACCGCAATTTCCGCA 1060  
 |||||



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Qy 279 AGGAGTTTGGCGTTTACCCACCCCGTGCAGTGCAGGACACCAACCAATCACCAGTC 338
Db 1059 AGTGTGTGGAGGAGACCCCCAGCCTTGGCAATTGAGGCGCGCTGCAGTCTCCCGTT 1000
Qy 339 ATGCAGAACTCTACAGACACCACTCGAAGTTACATCCAGTACGACCCCATATACGTGCC 398
Db 999 TGGCAGCGCGCGCGCGCTGCCATCAAGTTGCACCGGTGCGGCCCATATACGGGCC 940
Qy 399 ATCGTAGTGGCCCTPAGCGGCATCAATGACCAACGTTTGGCTCGATCGAGACGTTCGGCCA 458
Db 939 ATGGCAGTGGCCGGGTTTACCACAGAGGTTCCACGTTTGGCCACGGTCCAGACGCGGCCT 880
Qy 459 CCGCTATCGGGTGCATGCTGCCACAGACGCTGTATGACAGATTGTTGCGTACCTCGATA 518
Db 879 CCACCC---CGGACTCGCGCGGCCACACCGGTGAGGGGCAATTGTTGACGATCTCGAAG 823
Qy 519 GTGCAGCATAAAGTGAAGTCAAAAAGCAAGAGGAGGAGAAACAAAGAAAGATCTCAAG 578
Db 822 TTTTGACGATGATTGTTGCCAAAGGTAAGGCCAACGTTAGCAGAGAGACAGTGGCCAAG 763
Qy 579 TAGCCCATGT 588
Db 762 TAAACCAATT 753
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## RESULT 15

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US-10-259-165-389/c
; Sequence 389, Application US/10259165
; Publication No. US2003013588A1
; GENERAL INFORMATION:
; APPLICANT: Zhu, Tong
; APPLICANT: Wang, Xun
; APPLICANT: Chang, Hur-song
; APPLICANT: Briggs, Steven P.
; APPLICANT: Cooper, Bret
; APPLICANT: Glazebrook, Jane
; APPLICANT: Goff, Stephen A.
; APPLICANT: Katagiri, Fumiaki
; APPLICANT: Krepis, Joel
; APPLICANT: Moughamer, Todd
; APPLICANT: Provart, Nicholas
; APPLICANT: Ricke, Darrell
; TITLE OF INVENTION: GENES THAT ARE MODULATED BY POSTTRANSCRIPTIONAL GENE SILENCING
; FILE REFERENCE: 70030-NP
; CURRENT APPLICATION NUMBER: US/10/259,165
; PRIOR FILING DATE: 2002-09-26
; PRIOR FILING DATE: US 60/370,620
; PRIOR FILING DATE: 2002-04-04
; PRIOR APPLICATION NUMBER: US 60/368,327
; PRIOR FILING DATE: 2002-03-27
; PRIOR APPLICATION NUMBER: US 60/325,277
; PRIOR FILING DATE: 2001-09-26
; NUMBER OF SEQ ID NOS: 782
; SOFTWARE: PatentList.pl version 3.0.4 (C) 2001 Syngenta
; SEQ ID NO 389
; LENGTH: 717
; TYPE: DNA
; ORGANISM: Oryza sativa
US-10-259-165-389
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Query Match 10.1%; Score 155.8; DB 15; Length 717;
Best Local Similarity 57.9%; Pred. No. 9.2e-24;
Matches 297; Conservative 0; Mismatches 212; Indels 4; Gaps 1;

Qy 50 GGTGCAACAATATTGTTGTCTCCAAATGTGGTACAAGGATTTATCATCTCCGGGTAC 109
Db 541 GGTGCAAGTACTGTTGCTCTTGAACACCGTGCACGGTGTGTCACCGCGCGCGC 482
Qy 110 TTTAAGCTGACTAGGACATTCACTTATTTTGGCGTGCATTGAATTGG-----TGGC 165
Db 481 CCTCAGCTCGCTCGGGACATGCCCCGCGCACCGTCGCGCTCGCACCGCGCGCGCTTGGC 422
Qy 166 ATTTCCCTCCACTTGGATTAGTCGGGGGGAAGTCACTCGGTATATAATCCATCACTA 225
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Db 421 GCACCCGCGCCCGTCCGCGCGGGGAGGAAGTCCATGGGCACTTGAATCCGTCGATGA 362
Qy 226 AAGAAATGTCCCAAGAAATCTAAGTTGTTGAACCTGGTCCGAGGGCGTACTCGGCTAGGGTGT 285
Db 361 GGGAGATGTCGAAGNAAGTCGAGGTTGCTGAACCTGGTTTCAGGCGGAACCTCCGCCAGCGTGT 302
Qy 286 TTGGCGGTTTACCCCAACCCCGTGCATCTGCAAGGACACCAACCAATCAACAGTCAATGCACG 345
Db 301 TGGGCGGCTGCCCGTACGCGCGCACCGCAGCACGCGCGCGAGTCGCGCTCTGGCACCC 242
Qy 346 AACCTCTACAGCAGCACCATCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAG 405
Db 241 GCCCGTTGCGCGTGCCTCGAAGCTGCAGCCCGTGCAGCCGCCACACGCGCCCGCCCGTCG 182
Qy 406 TGCCCTCTAGGCGCATCAATGACCCACCGTTTGGCGCTCGATCGAGACGTGCGGCCACCGCCTA 465
Db 181 TGCGGCGCGGACGTCGATCACCACCTGCTGCCCGGGTCCAGCTGCTGCCCGCGCGCG 122
Qy 466 TCGGGGTTCGATGTGCGCCACAGCGGTGTATGGAAGATTGTTGGCTACCTCGANATGGCAG 525
Db 121 ACGGCACGGCTGCGCGCCACACCGTGTATCTGGCACTTGTGGTGTGATGGTGAACCGTGGCGG 62
Qy 526 CATAAGTGAAGTCAACAAAGCAAGAGGAGA 558
Db 61 CGTTCGCGCGCGCGCGAGGAGAGAGGGA 29
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Job time : 971.901 secs

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OM nucleic - nucleic search, using sw model

Run on: June 17, 2005, 17:23:59 ; Search time 252.501 Seconds  
(without alignments)  
10018.495 Million cell updates/sec

Title: US-10-051-307-3

Perfect score: 1546

Sequence: 1 atcttggttgaaaaattg.....tggagaagtggtgttttc 1546

Scoring table: IDENTITY NUC.

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- Issued Patents NA:\*\*
- 1: /cgn2\_6/ptodata/1/ina/5A COMB.seq.\*
- 2: /cgn2\_6/ptodata/1/ina/5B COMB.seq.\*
- 3: /cgn2\_6/ptodata/1/ina/6A COMB.seq.\*
- 4: /cgn2\_6/ptodata/1/ina/6B COMB.seq.\*
- 5: /cgn2\_6/ptodata/1/ina/PCTUS COMB.seq.\*
- 6: /cgn2\_6/ptodata/1/ina/backfiles1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
C 1	500	32.3	3033	1	US-08-482-037A-1
C 2	450.4	29.1	883	1	US-07-828-798C-4
C 3	450.4	29.1	883	2	US-08-315-868A-4
C 4	450.4	29.1	883	3	US-08-495-819B-4
C 5	450.4	29.1	884	1	US-07-828-798C-5
C 6	450.4	29.1	884	2	US-08-315-868A-5
C 7	450.4	29.1	884	3	US-08-495-819B-5
C 8	180.6	11.7	875	4	US-09-589-733C-4
C 9	159.2	10.3	900	1	US-08-181-271A-4
C 10	159.2	10.3	900	1	US-08-449-315-4
C 11	159.2	10.3	900	1	US-08-444-803-4
C 12	159.2	10.3	900	1	US-08-449-043-4
C 13	159.2	10.3	900	1	US-08-456-265A-4
C 14	159.2	10.3	900	1	US-08-455-416-4
C 15	159.2	10.3	900	1	US-08-455-244-4
C 16	159.2	10.3	900	1	US-08-454-876-4
C 17	159.2	10.3	900	2	US-08-457-364-4
C 18	159.2	10.3	900	2	US-08-456-262-4
C 19	159.2	10.3	900	2	US-08-456-240-4
C 20	159.2	10.3	900	2	US-08-455-736-4
C 21	159.2	10.3	900	2	US-08-971-217-4
C 22	159.2	10.3	900	3	US-09-350-600-4
C 23	159.2	10.3	900	4	US-09-906-234-4
C 24	152.6	9.9	910	4	US-09-685-292-1
C 25	124.8	8.1	894	1	US-08-178-708-7
C 26	124.8	8.1	894	1	US-08-457-552-7
C 27	124.8	8.1	894	1	US-08-456-430-7

C 28	124.8	8.1	894	2	US-08-994-418-7	Sequence 7, Appli
C 29	124.8	8.1	894	5	PCT-US95-00432-7	Sequence 7, Appli
C 30	101	6.5	1309	6	5221624-4	Patent No. 5221624
C 31	101	6.5	1309	6	5221624-4	Patent No. 5221624
C 32	94	6.1	621	3	US-09-224-514A-1	Sequence 1, Appli
C 33	94	6.1	621	6	5221624-31	Patent No. 5221624
C 34	94	6.1	621	6	5221624-31	Patent No. 5221624
C 35	92.8	6.0	621	3	US-09-224-514A-9	Sequence 9, Appli
C 36	83	5.4	624	2	US-08-426-599B-3	Sequence 3, Appli
C 37	76.4	4.9	624	2	US-08-426-599B-1	Sequence 1, Appli
C 38	73.8	4.4	2051	1	US-08-482-037A-2	Sequence 2, Appli
C 39	67.8	4.4	230	4	US-09-589-733C-28	Sequence 28, Appli
C 40	65.6	4.2	1141	4	US-09-806-708B-22	Sequence 22, Appli
C 41	63.2	4.1	1141	4	US-09-806-708B-22	Sequence 22, Appli
C 42	61.8	4.0	114139	4	US-09-949-016-16536	Sequence 16536, A
C 43	61.8	4.0	187169	4	US-09-949-016-12776	Sequence 12776, A
C 44	61.8	4.0	191569	4	US-09-949-016-15940	Sequence 15940, A
C 45	57	3.7	12909	4	US-09-949-016-14037	Sequence 14037, A

ALIGNMENTS

RESULT 1  
US-08-482-037A-1/c  
; Sequence 1, Application US/08482037A  
; Patent No. 5801028  
; GENERAL INFORMATION:  
; APPLICANT: Ray Bressan and Paul M. Hasegawa  
; TITLE OF INVENTION: Osmotin Gene Promoter and Use Thereof  
; NUMBER OF SEQUENCES: 2  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Thomas Q. Henry  
; STREET: Bank One Tower, Suite 3700, 111 Monument Circle  
; CITY: Indianapolis  
; STATE: Indiana  
; COUNTRY: USA  
; ZIP: 46204-5137  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage  
; COMPUTER: COMPAQ  
; OPERATING SYSTEM: MSDOS  
; SOFTWARE: ASCII  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/482,037A  
; FILING DATE: June 7, 1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/476,243  
; FILING DATE: June 7, 1995  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/180,428  
; FILING DATE: January 12, 1994  
; APPLICATION NUMBER: 08/065,147  
; FILING DATE: May 20, 1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Thomas Q. Henry  
; REGISTRATION NUMBER: 28,309  
; REFERENCE/DOCKET NUMBER: 7024-8/PUR16CIPDIVII  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (317) 634-3456  
; TELEFAX: (317) 637-7561  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 3033 bases  
; TYPE: Nucleotide/Amino Acid  
; STRANDEDNESS: Double  
; TOPOLOGY: Linear  
; MOLECULE TYPE: Genomic DNA  
; US-08-482-037A-1  
Query Match 32.3% Score 500; DB 1; Length 3033;

Best Local Similarity 71.1%; Pred. No. 4e-114;  
Matches 749; Conservative 0; Mismatches 265; Indels 40; Gaps 5;

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QY 61 ATGTGTCTCCCAATGTGTGTACAGGATTTGATCATCTCCGGTACTTTAACTGAC 120
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Db 2499 GGGGACATTCGCGGTTATTTAGCGGTACATGAATTCGATGCAATTTCCCTCCACTAG 2440
QY 181 GATTAGTCGGGCGAAAGTCATCGGTATTTAAATCCATCAATCAAGAAATGTCCCGAGA 240
Db 2439 GGTAGTCGGGCGAAAGTCATCGGAATGTTGAATCCATCAATCAAGAAATGTCCCGAGA 2380
QY 241 AATCTAAGTTGTTGAACTGGTCCGAGGCGTACTCGCTAGGTGTTTGGCGGTTTACCCC 300
Db 2379 AATCTAAGTTGTTGAACTGGTCCGAGGCGTACTCGCTAGGTGTTTGGCGGTTTACCCC 2320
QY 301 ACCCGTGCATCGAGGACCAACCAATCAATCAATCAATCAATCAATCAATCAATCAAT 360
Db 2319 ACCCGTGCATCGAGGACCAACCAATCAATCAATCAATCAATCAATCAATCAATCAAT 2260
QY 361 CATCGAAGTTACATCAAGTACGACCCCATATAGTGCCATCGTATGCGGCTGCGGAT 420
Db 2259 CATCGAAGTTACATCAAGTACGACCCCATATAGTGCCATCGTATGCGGCTGCGGAT 2200
QY 421 CAATGACCCACGTTTGGCTCGATCGAGCGTCCGCGCACCGGCTATCGGGTCTGATG 480
Db 2199 TGATCAACCCACGTTTGGCTCGATCGAGCGTCCGCGCACCGGCTATCGGGTCTGATG 2140
QY 481 CCCAGACGCTGTATGACAGTTGTTGCGTACCTCGATAGTGCAGCATAGTGAAGTCA 540
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QY 541 CAAAGCAAGAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGTTTGTGAAATTT 600
Db 2079 CCAAGCAAGAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGTTTGTGGAATTT 2020
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QY 642 ATGGCGGCTTTTGGCACTATGATATTAATCGTATTAATACATATATATATATATAT 701
Db 1959 ATGGCGGCTTTTGGCACTATGATATTAATCGTATTAATACATATATATATATATAT 1905
QY 702 AATTATAACAATTAATTAACAATGATTTGGTAAAGTTGAGTGGC-AAAATGAT 760
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QY 761 AAGAGCCGCTAATTAATTAATTTTATGATATAGACTATAGTACAGTGAATTTA 820
Db 1847 AAGAGCCGCTAATTAATTAATTTTATGATATAG-----AAGTCAATTTA 1800
QY 821 TTTGTTGATAAATCTGGACATATAAACTCTGTATCTGTGACGGAATCTTTCTTAAACTAAA 880
Db 1799 TTTGTTGATAAATCTGGACATATAAATCTGTATCTGTGACGGAATCTTTCTTAAACTAAA 1740
QY 881 TATTAAGAGAGCTATTTTAATATATTTTTCGTCGCAAGTTTCTTGCACTATCTAT 940
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Db 1619 AAAATAAACTCAAAACAATAATATTTCGTCAAAA 1586

RESULT 2  
US-07-828-798C-4/c  
; Sequence 4, Application US/07828798C  
; Patent No. 5389609  
; GENERAL INFORMATION:  
; APPLICANT: Moloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Neulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
; TITLE OF INVENTION: Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10023

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage

COMPUTER: IBM PC/XT/AT or compatibles

OPERATING SYSTEM: DOS

SOFTWARE: Word Perfect 5.1

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/828,798C

FILING DATE: 06-APR-1992

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/NL91/00089

FILING DATE: 31-05-91

ATTORNEY/AGENT INFORMATION:

NAME: Mass, Clifford J.

REGISTRATION NUMBER: 30086

REFERENCE/DOCKET NUMBER: U-8622-6

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 708-1800

TELEFAX: (212) 246-8959

TELEX: 233288

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 883

STRANDEDNESS: Double

TOPOLOGY: Linear

MOLECULE TYPE: cdna

ORIGINAL SOURCE:

ORGANISM: Nicotiana tabacum

US-07-828-798C-4

Query Match 29.1%; Score 450.4; DB 1; Length 883;  
Best Local Similarity 85.4%; Pred. No. 5e-102;  
Matches 502; Conservative 0; Mismatches 86; Indels 0; Gaps 0;

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QY 1 ATCTTTGTTGAAAAATTTGAAAAAGACGTAGGACCAATGACCTTTGGGTGCAACAAT 60
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Db 542 ATTTGTTGTCCTCCAAATGTTGTACAGGATTTTACATCTCTCCGGGTACTTTTAACTGAC 483
QY 121 TAGGACATTCACCATTTATTTTCCGCGGCAATTTGAATTCGCGGCAATTTCCCTCCACTTG 180
Db 482 GGGGACATTCGCGGTTTATTTAGCCGTACAAATGAATTCGATGCGATTTCCCTCCACTAG 423
QY 181 GATTAGTCGGGCGAAAGTTCATCGGTATATTTAAATCCATCAACTAAAGAAATGTCCCGAGA 240
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Db 422 GGTAGTCGGGCGAAAGTCATCGAATGTTGAATCCATCACTAAAGAAATGCCAG 363  
Qy 241 AATCTAAGTTCTGAACCTGGTCCGAGCGTACTCGGCTAGGCTGTTGGCGGTTTACCCC 300  
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Db 302 ACCCGGTGCACTGAGGACACACACAAATCACCAGTATGACGAAACCTCTACCAGCAC 243  
Qy 361 CATGAGATTCATCCAGTACGACCCATATACGTCGATCGGCTATCGGCTTACGCGCAT 420  
Db 242 CATGAGATTCATCCAGTACGACCCATATACGTCGATCGGCTTACGCGCAT 183  
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Db 182 TGATCACCAGTTTGGCTCGATCGAGACGTCGGCCACCGCTATCGGCTTACGCGCAT 123  
Qy 481 CCCAGACGGTATGAGCAGTTTGGCTACCTCGATAGTGGCAGCATAAGTGAAGTCA 540  
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Db 62 CCAAGGCAAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGT 15

RESULT 3  
US-08-315-868A-4/c  
; Sequence 4, Application US/08315868A  
; Patent No. 5856151  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
; TITLE OF INVENTION: Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10023  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
; COMPUTER: IBM PC/XT/AT or compatibles  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/315,868A  
; FILING DATE: 09-SEP-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/828,798  
; FILING DATE: 06-APR-1992  
; APPLICATION NUMBER: PCT/NL91/00089  
; FILING DATE: 31-05-91  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mass, Clifford J.  
; REGISTRATION NUMBER: 30086  
; REFERENCE/DOCKET NUMBER: U-8622-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 708-1800  
; TELEFAX: (212) 246-8959  
; INFORMATION FOR SEQ ID NO: 4:

; SEQUENCE CHARACTERISTICS:  
; LENGTH: 883  
; TYPE: Nucleotide  
; STRANDEDNESS: Double  
; TOPOLOGY: Linear  
; MOLECULE TYPE: cDNA  
; ORIGINAL SOURCE:  
; ORGANISM: Nicotiana tabacum  
US-08-315-868A-4

Query Match 29.1%; Score 450.4; DB 2; Length 883;  
Best Local Similarity 85.4%; Pred. No. 5e-102;  
Matches 502; Conservative 0; Mismatches 86; Indels 0; Gaps 0;

Qy 1 ATCTTTCTTTGAAAAAATTTGAAAAAAGACGTAGGACACATGACCTTGGGTGCAACAAT 60  
Db 602 ATCTTTCTTTGAAAAAATTTGAAAAAATGTAGAACCAAGGTCCTTGTGTGCAACAT 543  
Qy 61 ATTGTTCTCTCCAAATGTGTACAGGATTTGTACATCTCTCGGGTACTTTAAAGCTGAC 120  
Db 542 ATTGTTCTCTCCAAATGTGTACAGGATTTGTACATCTCTCGGGTAAACCTAAAGTTCGC 483  
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Db 482 GGGGACATTCGCCGTTTATATTTAGCCGTACAAATGAATTCATGCGCATTTCCCTCCACTG 423  
Qy 181 GATTAGTCGGGGGAAAGTCATCGGTATATTTAAATCCATCAACTAAAAGAAATGTCCCGA 240  
Db 422 GATTAGTCGGGGGAAAGTCATCGGAATTTGAATTCATCAACTAAAAGAAATGTCCCGA 363  
Qy 241 AATCTAAGTTTGTGAACCTGTCGAGGCGTACTCGGCTAGGCTGTTTGGCGGTTTACCCC 300  
Db 362 AATCTAAGTTTGTGAACCTGTCGAGGCGTACTCGGCTAGGCTGTTTGGCGGTTTACCCC 303  
Qy 301 ACCCGGTGCACTGAGGACACACCAATCACCAGTATGACGAAACCTCTACCAGCAC 360  
Db 302 ACCCGGTGCACTGAGGACACACCAATCACCAGTATGACGAAACCTCTACCAGCAC 243  
Qy 361 CATGAGATTCATCCAGTACGACCCATATACGTCGATCGGCTATCGGCTTACGCGCAT 420  
Db 242 CATGAGATTCATCCAGTACGACCCATATACGTCGATCGGCTTACGCGCAT 183  
Qy 421 CAATGACCCAGTTTGGCTCGATCGAGACGTCGGCCACCGCTATCGGCTTACGCGCAT 480  
Db 182 TGATCACCAGTTTGGCTCGATCGAGACGTCGGCCACCGCTATCGGCTTACGCGCAT 123  
Qy 481 CCCAGACGGTATGAGCAGTTTGGCTACCTCGATAGTGGCAGCATAAGTGAAGTCA 540  
Db 122 CCCAAACGGTACGACAGTTTGGCTACCTCGATAGTGGCAGCATAAGTGAAGTCA 63  
Qy 541 CAAAGCAGAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGT 588  
Db 62 CCAAGGCAAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGT 15

RESULT 4  
US-08-495-819B-4/c  
; Sequence 4, Application US/08495819B  
; Patent No. 6087161  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants  
; TITLE OF INVENTION: with Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street

CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10023  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
COMPUTER: IBM PC/XT/AT or compatibles  
OPERATING SYSTEM: DOS  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/495,819B  
FILING DATE: 31-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/315,868  
FILING DATE: 30-SEPT-94  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 07/828,798  
FILING DATE: 06-APRIL-92  
APPLICATION NUMBER: PCT/NL91/00089  
FILING DATE: 31-05-91  
ATTORNEY/AGENT INFORMATION:  
NAME: Mass, Clifford J.  
REGISTRATION NUMBER: 30086  
REFERENCE/DOCKET NUMBER: U-010255-1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 708-1800  
TELEFAX: (212) 246-8959  
TELEX: 233288  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 883  
TYPE: Nucleotide  
STRANDEDNESS: Double  
TOPOLOGY: Linear  
MOLECULE TYPE: CDNA  
ORIGINAL SOURCE:  
ORGANISM: Nicotiana tabacum  
US-08-495-819B-4

Query Match 29.1%; Score 450.4; DB 3; Length 883;  
Best Local Similarity 85.4%; Pred. No. 5e-102;  
Matches 502; Conservative 0; Mismatches 86; Indels 0; Gaps 0;

QY 1 ATCTTTGTTGAAAAATTGGAAGACGCTAGGACCAATGCTTGGGTGCAACAAT 60  
DB 602 ATCTTTGTTGAAAAATTGGAAGACGCTAGGACCAATGCTTGGGTGCAACAAT 543

QY 61 ATGTTGCTCCTCAATGTTGTTACAGGATGTTTACATCCTCGGGTACTTTAAGCTGAC 120  
DB 542 ATGTTGCTCCTCGAATGTTGTTACAGGATGTTTACATCCTCGGGTACTTTAAGCTGAC 483

QY 121 TAGGACATTCACATTTATTTGCGTGCTGTTGTTGCGTGGGCTTCCCTCCACTTG 180  
DB 482 GGGGACATTCGCGTTTATTTAGCGGTACATGATGATGCTGCTTCCCTCCACTAG 423

QY 181 GATTAGTCGGGCGGAAGTCATCGGTATTTAAATCCATCACTAAAGAAATGTCCCGAGA 240  
DB 422 GGTAGTCGGGCGGAAGTCATCGGTATTTAAATCCATCACTAAAGAAATGTCCCGAGA 363

QY 241 ATCTTAAGTTGTTGAACTGGTCCGAGGCGTACTCGGCTAGGTTGTCGGTTTACCCC 300  
DB 362 AATCTAAACCACTGAATTTGTTGTTCCAAAGCGTATTCAGCCAAAGGTTGTTGTCGGTTTACCCC 303

QY 301 ACCCGGTGCTGAGGACCAACACATCACCAGTCATGACGAACTCTPACCGAC 360  
DB 302 ACCCGGTGCTGAGGACCAACACATCACCAGTCATGACGAACTCTPACCGAC 243

QY 361 CATCGAAGTTACATCCAGTACGACCCCATATACGTCGATCGTCCCTTAGCGCAT 420  
DB 242 CATCGAAGTTACATCCAGTACGACCCCATATACGTCGATCGTCCCTTAGCGCAT 183

QY 421 CAATGACCCAGTTTGGCTCGATCGAGACGTCGCCACCGCTATCGGGTGCATGCTG 480  
DB 182 TGATCACCACAGTTTGGCTCGATCGAGACGTCGCCACCGCTATCGGGTGCATGCTG 123

QY 481 CCCAGACGCTGATGACAGATTGTTGCGTACCTCGATAGTGGCAGCATAAGTGAAGTCA 540  
DB 122 CCCAACGCTGATGACAGATTGTTGCGTACCTCGATAGTGGCAGCATAAGTGAAGTCA 63

QY 541 CAAAGCAAGAGGAGGAGAAACAAAGAAAGATCTCAAGTAGCCCATGT 588  
DB 62 CCAAGCAAGAGGAGGAGGAGAAACAAAGAAAGATCTCAAGTAGCCCATGT 15

## RESULT 5

US-07-828-798C-5/c  
Sequence 5, Application US/07828798C  
Patent No. 5389609  
GENERAL INFORMATION:  
APPLICANT: Woloshuk, Charles P.  
APPLICANT: Melchers, Leo S.  
APPLICANT: Cornelissen, Bernardus J. C.  
APPLICANT: Meulenhoff, Elisabeth J. S.  
APPLICANT: Sela-Buurlage, Marianne B.  
APPLICANT: Van Den Elzen, Petrus J. M.  
TITLE OF INVENTION: Antifungal Preparations, Process for  
TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
TITLE OF INVENTION: Decreased Susceptibility to Fungi  
NUMBER OF SEQUENCES: 7  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Ladas & Parry  
STREET: 26 West 61st Street  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10023  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
COMPUTER: IBM PC/XT/AT or compatibles  
OPERATING SYSTEM: DOS  
SOFTWARE: Word Perfect 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/07/828,798C  
FILING DATE: 06-APR-1992  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/NL91/00089  
FILING DATE: 31-05-91  
ATTORNEY/AGENT INFORMATION:  
NAME: Mass, Clifford J.  
REGISTRATION NUMBER: 30086  
REFERENCE/DOCKET NUMBER: U-8622-6  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 708-1800  
TELEFAX: (212) 246-8959  
TELEX: 233288  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 884  
TYPE: Nucleotide  
STRANDEDNESS: Double  
TOPOLOGY: Linear  
MOLECULE TYPE: CDNA  
ORIGINAL SOURCE:  
ORGANISM: Nicotiana tabacum  
US-07-828-798C-5

Query Match 29.1%; Score 450.4; DB 1; Length 884;  
Best Local Similarity 85.4%; Pred. No. 5e-102;  
Matches 502; Conservative 0; Mismatches 86; Indels 0; Gaps 0;

QY 1 ATCTTTGTTGAAAAATTGGAAGACGCTAGGACCAATGCTTGGGTGCAACAAT 60  
DB 602 ATCTTTGTTGAAAAATTGGAAGACGCTAGGACCAATGCTTGGGTGCAACAAT 543



Qy	61	ATTGTTGCTCCCAAACTGTGTACAAAGGATGTTACATCCTCGGGTACTTTAAGCTGAC	120
Db	542		483
Qy	121	TAGGACATTCCACCTTTATATTGCGCGTGCAATTGAATTGCGTGGCAATTTCCCTCCACTTG	180
Db	482		423
Qy	181	GATTAGTCGGGCGGAAAGTCATCGGTATATTAAATCCATCAACTAAGAAATGTCCACGA	240
Db	422	GGTTAGTCGGGCGGAAAGTCATCGGAATGTTGAATCCATCAACTAAGAAATGTCCACGA	363
Qy	241	AATCTAAGTTGTTGAACTGCTCGGAGGGGTACTCGCTAGGGTGTGTCGGGTTTACCC	300
Db	362		303
Qy	301	ACCGGTGCACTGCAGGACACACCACAATCACCAGTCAATGCACGAACCTCTACACAGCAC	360
Db	302	ACCGGTGCACTGTAGGACTCCACACAGTCACCGGTTGGACAGTACCCCTACACAGAC	243
Qy	361	CATCGAAGTTACATCCAGTAGACACCCATATACGTGCCATCGTAGTGCCCTTAGGCGCAT	420
Db	242	CATTGAAGTTACAAATTAGTAGCGGCCCATACACGTGCCATTTTGTAGTACCTCGTGCGCAT	183
Qy	421	CAATGACCCACGTTTGGCCTCGATCGAGACGTCGGCCACCGCCTATCGGGTCGATGCTG	480
Db	182	TGATCACCCAAGTTTGGCTCGATCGAGACGCGGCCACCGCCTATGGGTGTCGACGGCG	123
Qy	481	CCCAGACGGTGATGGACAGTTGTTGCGTGACTCTCGATAGTGGCAGCATAAAGTGAAGTCA	540
Db	122	CCCAACCGTGTAACGACAGTTGTTTCGGACCTCGATAGTGGCAGCATAAAGTATAGTCA	63
Qy	541	CAAAAGCAAGAGGAGGAGAAAACAAAGAAGATCTCCAAGTAGCCCCATGT	588
Db	62	CCAAGGCAAGGAGAGGAGAAAACAAAGAAGATCTCAAGTTGCCCATGT	15

## RESULT 6

US-08-315-868A-5/C  
; Sequence 5, Application US/08315868A  
; Patent No. 5856151  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
; TITLE OF INVENTION: Decreased Susceptibility to Fungi

```

; FILING DATE: 31-05-91
; ATTORNEY/AGENT INFORMATION:
; NAME: Mass, Clifford J.
; REGISTRATION NUMBER: 30086
; REFERENCE/DOCKET NUMBER: U-8622-6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 708-1800
; TELEFAX: (212) 246-8959
; TELEX: 233288
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 884
; TYPE: Nucleotide
; STRANDEDNESS: Double
; TOPOLOGY: Linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Nicotiana tabacum
; US-08-315-868A-5

Query Match 29.1%; Score 450.4; DB 2; Length 884;
Best Local Similarity 85.4%; Pred. No. 5e-102;
Matches 502; Conservative 0; Mismatches 86; Indels 0; Gaps 0;

Qy 1 ATCTTTGTTTGA AAAAATTTGGA AAGACG TAGGACCA CATG GACCTCTGGGTGCAACAAT 60
Db 602 ATCTTTGTTTGA AAAAATTTGGA AAAAAATGTAGGACCA CAAGAGTCCCTGTGTGCAACAAT 543

Qy 61 ATGTTGTGTCCTCAAAATGTTGAC AAGATTGTTACATCCTCCGGGTACTTTAAAGCTGAC 120
Db 542 ATGTTGTGTCCTCGAATGTAGTAC AAGGTTATTACATCCTCGGGAAACCTTAAGTTCCG 483

Qy 121 TAGGACATTCACCAATTTATTTG CCGTCGTCATTTGAATTCGTGGCAATTTCCCTCCACTTG 180
Db 482 GGGGACATTCGCGCGTTTATTAG CCGTACAATGAATTCGATGGCAATTTCCCTCCACTAG 423

Qy 181 GATTAGTCGGGGGAAAGTCATCGGTATATTAATTCATCACTAAAGAAATGTCGCCAGA 240
Db 422 GGTTAGTCGGGGCGAAGTCATCGGAATTTGAATTCATCACTAAAGAAATGTCGCCAGA 363

Qy 241 AATCTAAGTTGTTTGAACTCGTC CCGAGGCGTACTCGGCTAGGGTGTTTGGCGGTTTACCCC 300
Db 362 AATCTAAGCACTGAATTTGGTCCA AGCGTATTCAGCCAAGGTGTTTGGTGGTTTACCCC 303

Qy 301 ACCCGGTGCACCTGCAGGACACCA CCAATACCAAGTCATGCAAGAACCTCTACCAGCAC 360
Db 302 ACCCGGTGCACCTGTAGGACTCC CACCACAGTCACCGGTTGGGACGTAACCCCTACCAGCAG 243

Qy 361 CATCGAAGTTACATCCAGTACGAC CCCCATAFATAGTGTCGCATCTAGTGCCCTTAGGCGCAT 420
Db 242 CATTTGAAGTTACAATTTAGTAC GCGCCCCATACACGTCGCCATTTTAGTACCTCGTGGCGCAT 183

Qy 421 CAATGACCCACGTTTGGCCCTCGA TCGAGACGTCGCGCACCGCCTATCGGGTCGATGCTG 480
Db 182 TGATACCCCAAGTTTGGCCCTCGA TCGAGACGCGCGCCACCGCCTATGGGTGTCGACGCCG 123

Qy 481 CCACAGCGGTGATGAGCAGTTGTTG CCGTACCTCGATAGTGGCAGCAGTAAGTGAAGTCA 540
Db 122 CCCAAACGGTGTACGGACAGTTGTT TCGGACCTCGATAGTGGCAGCATPAAGTATAAGTCA 63

Qy 541 CAAAGCAAGAGAGGGAGAAAAA CAAAGAAAGATCTCAAGTAGGCCCATGT 588
Db 62 CCAAGCAAGGAGGAAGAAAAA CAAAGAAAGATCTCAAGTTGCCCATGT 15

```

## RESULT 7

US-08-495-819B-5/c  
; Sequence 5, Application US/08495819B  
; Patent No. 6087161  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.



301	Qy	ACCCGTGCAC	TGAGGAC	CACCA	CAATCA	CCAGTCA	TGACAGAA	ACCTT	ACCAGCAC	360
283	Db	AGTTTTGGCA	TTGGAGGAC	CGTTG	CAATC	ACCGGT	CTGACAC	CTCCT	CGGCCGAAC	224
361	Qy	CATCGAAGT	TACAT	CCAGTAC	CACCC	CATATAG	TGTC	CCATG	TAGTCCCT	420
223	Db	CATCAAGT	TGCAN	TGTGT	CGGGCC	CAATAT	ACGGG	CTCTG	TGTCAGCT	164
421	Qy	CAATGAC	CCACG	TTTGG	CCCTGC	ATCGAG	ACGTGG	GCAC	CGCCCTAT	480
163	Db	TTAAAGAC	CACAG	TTTGG	CTGAG	TTAAG	TTGTG	CGCGCC	CAACC	107
481	Qy	CCACAG	ACG	TGTAT	GCACAG	TTGTT	GGCGT	ACCTCG	ATAGTGG	540
106	Db	CCCAAC	CGGTG	TATG	CACAG	TGTTT	TCGAT	AGTAG	AACAC	47
541	Qy	CAAAA	545							
46	Db	AAAGA	42							

## RESULT 9

US-06-181-271A-4/C  
; Sequence 4, Application US/08181271A  
; Patent No. 5614395  
; GENERAL INFORMATION:  
; APPLICANT: Ryals, John A.  
; APPLICANT: Alexander, Danny C.  
; APPLICANT: Beck, James J.  
; APPLICANT: Duesing, John H.  
; APPLICANT: Friedrich, Leslie B.  
; APPLICANT: Goodman, Robert M.  
; APPLICANT: Harms, Christian  
; APPLICANT: Meins, Jr., Frederick  
; APPLICANT: Montoya, Alice  
; APPLICANT: Moyer, Mary B.  
; APPLICANT: Neuhaus, Jean-Marc  
; APPLICANT: Payne, George B.  
; APPLICANT: Sperison, Christoph  
; APPLICANT: Stinson, Jeffrey R.  
; APPLICANT: Uknes, Scott J.  
; APPLICANT: Ward, Eric R.  
; APPLICANT: Williams, Shericca C.  
; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
; NUMBER OF SEQUENCES: 106

APPLICATION NUMBER: US 07/305,566  
 FILING DATE: 6-FEB-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/165,667  
 FILING DATE: 8-MAR-1988  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/042,847  
 FILING DATE: 6-APR-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/632,441  
 FILING DATE: 21-DEC-1990  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/425,504  
 FILING DATE: 20-OCT-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/848,506  
 FILING DATE: 6-MAR-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/768,122  
 FILING DATE: 27-SEP-1991  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/580,431  
 FILING DATE: 7-SEP-1990  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/368,672  
 FILING DATE: 20-JUN-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/329,018  
 FILING DATE: 24-MAR-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/045,957  
 FILING DATE: 12-APR-1993  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Elmer, James Scott  
 REGISTRATION NUMBER: 36,129  
 REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (919)541-8614  
 TELEFAX: (919)541-8689  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 900 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA  
 US-08-181-271A-4

Query Match	10.3%	Score 159.2	DB 1	Length 900		
Best Local Similarity	61.1%	Pred. No. 1e-29				
Matches 336	Conservative 0	Mismatches 193	Indels 21	Gaps 4		
Qy	1	ATCTTTGTTTGA	AAATTCG	AAAGAAC	CTAGGACCACAT-----GGACCTTGGGTGC	54
Db	604	ATCTTTCTTTAAAA	AAATCTCG	ACAAATCAGT	TAGGCCACATGATCCAGGCCCATTTGTG	545
Qy	55	AACAATATTCTGT	CTCTC	CAAAATG	TGTTCAACAGATTTGTTACATCTCTCCGGTACTTTAA	114
Db	544	AACAATATTCATT	TGGTTTTT	TATCAG	ATGATCATGGTTGTTTACATCCACCTTGTGTTTTCA	485
Qy	115	GCTGACTPAGGAC	ATTACCA	TTTATATTT	TGCCGTGCAATTGAAATGGGTGCATTTCCCTC	174
Db	484	ACTGTGCTGGGC	ATTGTTCT	TAATAGG	TGCTGTGCATCTGAGATTCGACATCCTCC--	427
Qy	175	CAC TTGGAATTAG	TCGGGGCG	AAAGTONT	CGGTATATTTAAATCCATCAACTAAAGAAATGT	234
Db	426	-----ATTGGT	CGGGCTG	AAATTTCC	ATGCGGGATGTTAAATCCATCAACAAGAGAGATGT	374
Qy	235	CCCAAGAAATCT	AAATGTTT	GAACTGGT	CCGAGGGTACTCGCGCTAGGGTGTTTGGCGGTT	294
Db	373	CGACAAAGTC	---CTG	ATTTGGGTT	GTATTAAGTGCAAATTCAGCTAAAGTGTTAGGTGCTT	317
Qy	295	TACCCACCCGGT	GCATCTG	CGAGGACAC	CCACCAATCACCAGTCAATCCAGCAACCTCTAC	354

Db 316 TTCCATAGCCTTGACACTCTAAATCCCGTTACAGTCTCCAGTCTCACAATACCTCGGC 257  
QY 355 CAGCACCATCGAAGTTACATCAGTAGCAGACCCCATATAGTGGCATCTAGTGGCCCTTAG 414  
Db 256 CACTGCCATCGAAGTTGCAATTTGGTTGCGACCCCAATGCGAGCCTGGACTGTTCTCTGGGT 197  
QY 415 GGCATCAATGACCCACGTTTGGCCTCGATCGAGAGCTGGCCACCGCCTATCGGGTGG 474  
Db 196 TCACATTAATGCTCCAGATTGGCTTGAGTCGAGCGCCTGCTCCACCT---GGAGAGG 140  
QY 475 ATGCTGCCAGAGCGGTGTATGACAGTGTGTTGCGTACCTTCGATAGTGGCAGCATAGTGA 534  
Db 139 CCGCGCCAGACTGTGTAGTGTGCAATTTGTTGACAATGTCAAAAGTGGCAGCATGATGA 80  
QY 535 AAGTACAAA 544  
Db 79 CAGCTACAAA 70

## RESULT 10

US-08-449-315-4/c  
Sequence 4, Application US/08449315  
Patent No. 5650505  
GENERAL INFORMATION:  
APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
DNA SEQUENCES AND USES THEREOF  
NUMBER OF SEQUENCES: 166  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/449,315  
FILING DATE: 24-MAY-1995  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/191,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/678,378  
FILING DATE: 1-APR-1991  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/E1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
US-08-449-315-4  
Query Match 10.3%; Score 159.2; DB 1; Length 900;  
Best Local Similarity 61.1%; Pred. No. 1e-29;  
Matches 336; Conservative 0; Mismatches 193; Indels 21; Gaps 4;  
QY 1 ATCTTTGTTTGAATAAATTTGGAAGAAGACGTAGGAGCACAT-----GGACCTTGGGTGC 54  
Db 604 ATCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTGTATC 545  
QY 55 AACAAATATTGTTGCTCCCAATGTGTGACAGGATTTGTATCATCTCTCGGGTACTTTAA 114  
Db 544 AACAAATATTGTTGTTTATTCACAGTACATGGGTTGTATCATCCACCTTGTGTTTCA 485  
QY 115 GCTGACTAGGACATTCACCATTTATTTTGGCTGTCATTTGAATTCGGTGGCATTTCCCTC 174  
Db 484 ACTGTGCTGGGCATTTGTTGTTTAAATAGGTGCTGTGTCATCTGAGATTACGACATCTCC-- 427  
QY 175 CACTTGGATTAGTCGGGGCGAAAGTCATCGGTGTATTAATTAATCCATCAACTAAAGAAATGT 234  
Db 426 -----ATTGTCGGGCTGAAATTCATGGGATGTTAAATCCATCAACACAGAGAGATGT 374  
QY 235 CCCAGAAATCTAAGTTGTTGAACTGGTCCGAGGCGGTACTCGGCTAGGGTGTGTTGGCGTT 294  
Db 373 CGACAAAGTC---CTGATTGGGTTGATTAAAGTGCAAAATTCAGCTAAAGTGTAGGTGCTT 317  
QY 295 TACCCACCCCGGTGCACTGCACTGCAGGACACCAACCAATCACCAGTCATGCACGAACCTCTAC 354

Db 316 TTCCATAGCCTTGACACTCTAACTCCCGTTTACAGTCTCCAGTCTCAATTAACCTCGGC 257  
Qy 355 CAGCACATCAAGTTACATCCAGTACGACCCCATATACGTCGATCGTGTGCTAG 414  
Db 256 CACTGCCATCAAGTTGCAATGTTGACCCCAATGCGAGCTTGACTGTTCTGGGT 197  
Qy 415 GCGCATCAATGACCCAGCTTTGGCTCGATCGAGACGTCGCGCCACCGCTATCGGGTGC 474  
Db 196 TCACATTAATGCTCCAAGATTGGCTGAGTCGAGCGCGCTGCTCCACCT---GGAGAGG 140  
Qy 475 ATGCTGCCAGACGCTATGACAGTGTGTCGTAAGTCTGATAGTGGCAGCATAAATGA 534  
Db 139 CCGCGGCCAGACTGTGTAGTGCATTTGTTGACAATGTCAAAAGTGGCAGCATGATGA 80  
Qy 535 AAGTCACAAA 544  
Db 79 CAGCTACAAA 70

## RESULT 11

US-08-444-803-4/c

; Sequence 4, Application US/08444803

; Patent No. 5654414

; GENERAL INFORMATION:

; APPLICANT: Ryals, John A.

; APPLICANT: Alexander, Danny C.

; APPLICANT: Beck, James J.

; APPLICANT: Duesing, John H.

; APPLICANT: Friedrich, Leslie B.

; APPLICANT: Goodman, Robert M.

; APPLICANT: Harms, Christian

; APPLICANT: Meins, Jr., Frederick

; APPLICANT: Montoya, Alice

; APPLICANT: Moyer, Mary B.

; APPLICANT: Neuhaus, Jean-Marc

; APPLICANT: Payne, George B.

; APPLICANT: Sperison, Christoph

; APPLICANT: Stinson, Jeffrey R.

; APPLICANT: Uknes, Scott J.

; APPLICANT: Ward, Eric R.

; APPLICANT: Williams, Shericca C.

; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC

; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF

; NUMBER OF SEQUENCES: 106

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: CIBA-GEIGY Corporation

; STREET: 7 Skyline Drive

; CITY: Hawthorne

; STATE: New York

; COUNTRY: USA

; ZIP: 10532

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/444,803

; FILING DATE: 19-MAY-1995

; CLASSIFICATION: 536

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: 08/181,271

; FILING DATE: 13-JAN-94

; APPLICATION NUMBER: US 08/093,301

; FILING DATE: 16-JUL-1993

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/937,197

; FILING DATE: 6-NOV-1992

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

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; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

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; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

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; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIORITY APPLICATION DATA:

; APPLICATION NUMBER: US 07/678

Db 316 TTCCATAGCCTTGACACTTAACATCCCGTTACAGTCTCCAGTCTCACAAATTAACCTGGC 257  
QY 355 GAGCACCATGGAAGTTACATCAGTACGACCCCATATAGTGGCATCGTAGTGGCCCTAG 414  
Db 256 CACTGCCATCGAAGTTGCAATTTGGTTGCAACCCCAATGCGAGCCTGGACTGTTCTCTGGGT 197  
QY 415 GGCATCAATGACCCACGTTTGGCCTCGATCGAGAGCTGGCCACCGCCTATCGGGGTG 474  
Db 196 TCACATTAATGCTCCAGATTGGCTTGAGTCCAGCGCCTGCTCACT---GGAGAGG 140  
QY 475 ATGCTGCCAGACGGTGTATGACAGTGTGTTGGTACCTTCGATAGTGGCAGCATAGTGA 534  
Db 139 CGCGGCCAGACTGTGTAGTGCATTTGTTGACAATGTCAAAAGTGGCAGCATGAGTAA 80  
QY 535 AAGTACAAA 544  
Db 79 CAGCTACAA 70

## RESULT 12

US-08-449-043-4/c  
Sequence 4, Application US/08449043  
Patent No. 5689044

## GENERAL INFORMATION:

APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
NUMBER OF SEQUENCES: 106

## CORRESPONDENCE ADDRESS:

ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/449,043  
FILING DATE: 24-MAY-1995

## CLASSIFICATION: 800

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/181,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/678,378  
FILING DATE: 1-APR-1991  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-449-043-4

Query Match 10.3%; Score 159.2; DB 1; Length 900;

Best Local Similarity 61.1%; Pred. No. 1e-29;

Matches 336; Conservative 0; Mismatches 193; Indels 21; Gaps 4;

QY 1 ATCTTTGTTTGAATAAATTTGAAAAAGAACGTAGGACCAACAT-----GGACCTTGGGTGC 54  
Db 604 ATCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTGTAC 545  
QY 55 AACATATTTGTTCTCCAAATGTGGTACAGGATTTGTATCATCTCGGGTACTTTAA 114  
Db 544 AACATATTTCAATTTGGTTTTTATCACAGTACATGGGTTGTATCATCCACCTTGTGTTC 485  
QY 115 GCTGACTAGGACATTCACCATTTATTTTGGGTGCAATTTGAATTCGGTGGCAATTTCCCTC 174  
Db 484 ACTGTGCTGGGCATTTGTTGTTAATAGGTGTGTGCACTGAGATTACGACATCTCTCC-- 427  
QY 175 CACTTGGATTAGTCCGGGCGAAAGTCATCGGTATATTAATTAATCCATCAACTAAAGAAATGT 234  
Db 426 -----ATTGTCGGGCTGAATTCATGGGATGTTAAATCCATCAACAAGAGAGATGT 374  
QY 235 CCCAGAAATCTAAGTTTGTGAAGTCCGAGGCGGTACTCGCTAGGGTGTGTTGGCGTT 294  
Db 373 CGACAAAGTC---CTGATTGGGTTGATTAAGTGCAAAATTCAGTAAAGTGTAGGTGCTT 317  
QY 295 TACCCCAACCGGTGCACTGCAGGACACCAACCAATCACCAGTCATGCAACGAACCTCTAC 354



Db 316 TTCCATAGCTTGACACTTAACTCCCGTTACAGTCTCCAGTCTCAAAATTACCTCGGC 257  
Qy 355 CAGCACCATCAAGTTACATCCAGTACGACCCCATATACGTGCCATCTAGTGCCTTAG 414  
Db 256 CACTGCCATCAAGTTGCAATGTTCCACCCCAATCGAGCTTGACTGTTCTGGGT 197  
Qy 415 CGCATCAATGACCCACGCTTTGGCTCGATCGAGACGTCGCGCCACCGCTATCGGGTGC 474  
Db 196 TCACATTAATGCTCAAGATTGGCTGAGTCGAGCGCGCTGCCCTCCACCT--GGAGAGG 140  
Qy 475 ATGCTGCCACACGCTGATCGACAGTTGTTGGCTGATCTCCTGATAGTGCACATAGTGA 534  
Db 139 CCGCGGCCACAGTGTGTAGTGCATTTGTTGACAATGTCAAAAGTGGCAGCATGAGTAA 80  
Qy 535 AAGTCACAAA 544  
Db 79 CAGCTACAAA 70

## RESULT 13

US-08-456-265A-4/c  
; Sequence 4, Application US/08456265A  
; Patent No. 5767369  
; GENERAL INFORMATION:  
; APPLICANT: Alexander, Danny C.  
; APPLICANT: Rvals, John A.  
; APPLICANT: Goodman, Robert M.  
; APPLICANT: Stinson, Jeffrey R.  
; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
; NUMBER OF SEQUENCES: 111  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: CIBA-GEIGY Corporation  
; STREET: 520 White Plains Road, P.O. Box 2005  
; CITY: Tarrytown  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10591  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; FILING DATE: 31-MAY-95  
; CLASSIFICATION: 435  
; PRIOR APPLICATION NUMBER: US 08/181,271  
; FILING DATE: 13-JAN-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/093,301  
; FILING DATE: 16-JUL-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/937,197  
; FILING DATE: 6-NOV-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/678,378  
; FILING DATE: 1-APR-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/305,566  
; FILING DATE: 6-FEB-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/165,667  
; FILING DATE: 8-MAR-1988  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/042,847  
; FILING DATE: 6-APR-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/632,441  
; FILING DATE: 21-DEC-1990  
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/425,504  
; FILING DATE: 20-OCT 1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/848,506  
; FILING DATE: 6-MAR-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/768,122  
; FILING DATE: 27-SEP-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/580,431  
; FILING DATE: 7-SEP-1990  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/368,672  
; FILING DATE: 20-JUN-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/329,018  
; FILING DATE: 24-MAR-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/045,957  
; FILING DATE: 12-APR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meigs, J. Timothy  
; REGISTRATION NUMBER: 38,241  
; REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727/DIV10  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (919)541-8587  
; TELEFAX: (919)541-8689  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 900 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; US-08-456-265A-4

Query Match 10.3%; Score 159.2; DB 1; Length 900;  
Best Local Similarity 61.1%; Pred. No. 1e-29;  
Matches 336; Conservative 0; Mismatches 193; Indels 21; Gaps 4;  
Qy 1 ATCTTTGTTGAAAAATCGAAAAAGAACGTAGGACCAACAT-----GGACCTTGGGTGC 54  
Db 604 ATCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCAATTTGTAC 545  
Qy 55 AACAAATATTGTTGCTCCAAATGTGTACAAAGATTGTACATCTCCGGGTACTTTAA 114  
Db 544 AACAAATATTGTTGTTTATCACAGTACATGGGTTGTACATCCACCTTGTGTTTCA 485  
Qy 115 GCTGACTAGGACATTCACCAATTTATATTTCGCGTGCAATTGAATTCGCTGGCAATTCCTC 174  
Db 484 ACTGTGCTGGCAATTTGCTTAATAGGTGCTGTGCATCTGAGATTAGACATCCTCC-- 427  
Qy 175 CACTTGGATTAGTCGGGGCGAAAAGTCAATCGGTATATTAAATCCATCAACTAAAGAAATGT 234  
Db 426 -----ATTGGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAGAGAGATGT 374  
Qy 235 CCAGAAAATCTAAGTTGTTGAACTGGTCCGAGGGGTACTCGGCTAGGGTGTGTTGGCGGTT 294  
Db 373 CGACAAAAGTC---CTGATTGGGTTGATTAAAGTGCAAAATTCAGCTTAAAGTGTAGGTGCTT 317  
Qy 295 TACCCACCCGGTGCCTGCAGGACACACACAAATCCAGATCATGCAGCAACTCTAC 354  
Db 316 TTCCATAGCTTGAACCTCTAAACATCCCGTTACAGTCTCAGTCTCAATATTACCTCGGC 257  
Qy 355 CAGCACCATCGAAAGTTACATCCAGTACGACCCCATATATACGTGCCATCGTAGTCCCTTAG 414  
Db 256 CACTGCCATCGAAGTTGCAATTTGTTCCGACCCCAATGCGAGCTTGACTGTTCTGGGT 197  
Qy 415 GCGCATCAATGACCCACGTTTGGCTCGATCGAGACGTCGCGCCACCGCTATCGGGGTGC 474  
Db 196 TCACATTAATGCTCCAAGATTGGCTGAGTCGAGCGCGCTGCTCCACCT---GGAGAGG 140  
Qy 475 ATGCTGCCACAGCGGTGATGGACAGTTGTTGGTACTCTGATAGTGCACATAGTGA 534

Db 139 CCGCGGCCAGACTGTGTAGTGCATTGTTGACAAATGCAAAAAGTGCAGCATGAGTAA 80  
 QY 535 AAGTCACAAA 544  
 Db 79 CAGCTACAAA 70

RESULT 14  
 US-08-455-416-4/c  
 ; Sequence 4, Application US/08455416  
 ; Patent No. 5777200  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Ryals, John A.  
 ; APPLICANT: Alexander, Danny C.  
 ; APPLICANT: Beck, James J.  
 ; APPLICANT: Duesing, John H.  
 ; APPLICANT: Friedrich, Leslie B.  
 ; APPLICANT: Goodman, Robert M.  
 ; APPLICANT: Harms, Christian  
 ; APPLICANT: Meins, Jr., Frederick  
 ; APPLICANT: Montoya, Alice  
 ; APPLICANT: Moyer, Mary B.  
 ; APPLICANT: Neuhaus, Jean-Marc  
 ; APPLICANT: Payne, George B.  
 ; APPLICANT: Sperison, Christoph  
 ; APPLICANT: Stinson, Jeffrey R.  
 ; APPLICANT: Uknes, Scott J.  
 ; APPLICANT: Ward, Eric R.  
 ; APPLICANT: Williams, Shericca C.  
 ; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
 ; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
 ; NUMBER OF SEQUENCES: 106  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: CIBA-GEIGY Corporation  
 ; STREET: 7 Skyline Drive  
 ; CITY: Hawthorne  
 ; STATE: New York  
 ; COUNTRY: USA  
 ; ZIP: 10532

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/455,416  
 FILING DATE: 31-MAY-1995  
 CLASSIFICATION: 800  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/181,271  
 FILING DATE: 13-JAN-94  
 APPLICATION NUMBER: US 08/093,301  
 FILING DATE: 16-JUL-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/937,197  
 FILING DATE: 6-NOV-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/678,378  
 FILING DATE: 1-APR-1991  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/305,566  
 FILING DATE: 6-FEB-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/165,667  
 FILING DATE: 8-MAR-1988  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/042,847  
 FILING DATE: 6-APR-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/632,441  
 FILING DATE: 21-DEC-1990  
 PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/425,504  
 ; FILING DATE: 20-OCT-1989  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/848,506  
 ; FILING DATE: 6-MAR-1992  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/768,122  
 ; FILING DATE: 27-SEP-1991  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/580,431  
 ; FILING DATE: 7-SEP-1990  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/368,672  
 ; FILING DATE: 20-JUN-1989  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/329,018  
 ; FILING DATE: 24-MAR-1989  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/045,957  
 ; FILING DATE: 12-APR-1993  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Elmer, James Scott  
 ; REGISTRATION NUMBER: 36,129  
 ; REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (919)541-8614  
 ; TELEFAX: (919)541-8689  
 ; INFORMATION FOR SEQ ID NO: 4:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 900 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: cdna  
 ; US-08-455-416-4

Query Match 10.3%; Score 159.2; DB 1; Length 900;  
 Best Local Similarity 61.1%; Pred. No. 1e-29;  
 Matches 336; Conservative 0; Mismatches 193; Indels 21; Gaps 4;  
 QY 1 ATCTTTGTTGAAAAAATGGAAAAAGACGTAGGACCAACAT-----GGACCTTGGGTGC 54  
 Db 604 ATCTTTCTCTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCAATTTGTAC 545  
 QY 55 AACAAATATTGTTCCTCCAAATGTGTACAGAGTTGTACATCTCCGGGTACTTTAA 114  
 Db 544 AACAAATATTCATTGGTGTATTTATCAGTACATGAGTGGTGTGTATCCACCTTGTGTTTCA 485  
 QY 115 GCTGACTAGGACATTCACCAATTTATTTGCGGTGCATTGAATTCGCGTGGCAATTTCCCTC 174  
 Db 484 ACTGTGCTGGGCATTTGCTGTATAGTGTCTGTGCATCTGAGATTAGCATCTCTCC-- 427  
 QY 175 CACTTGGATTAGTCGGGCGCAAGTCATCGGTATATTAATCCATCAACTAAAGAAATGT 234  
 Db 426 -----ATTGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGAGATGT 374  
 QY 235 CCCAGAAATCTAAGTTGTTGAACTGGTCCGAGGCGTACTCCGCTAGGCTGTTTGGCGGTT 294  
 Db 373 CGACAAAGTC---CTGATTGGGTTGATTTAAGTCAAAATTCAGCTAAAGTGTAGGTGCTT 317  
 QY 295 TACCCACCGGTGCATCTGAGGACACCCACCAATACACAGTATGATGACCAACCTCTAC 354  
 Db 316 TTCAATAGCTTGACACTCTAACATCCCGTTACAGTCTCCAGTCTCACAATATTACCTCGGC 257  
 QY 355 CAGCACCATCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAGGCCCTAG 414  
 Db 256 CACTGCCATCGAAGTTGCAATTTGTCGACCCCAATGCGAGCGCTGGACTGTTCCTGGGT 197  
 QY 415 GCGCATCAATGACCCCACTGTTGGCTCGATCGAGAGCTCGGCCACCGCTATCGGGTCG 474  
 Db 196 TCACATTAATGCTCCAGATTTGGCTGAGTCGAGCGCGCTCCCTCCACCT---GAGAGG 140  
 QY 475 ATGCTGCCACGAGCGGTGTATGGACAGTTGTTGCGTACCTCGATAGTGGCAGCATAAGTGA 534

Db 139 CCGGGCCACACGTGTAGTGTGATTTGTTGACAAATGTCACAGTATGAGTAA 80  
Qy 535 AAGTCACAAA 544  
Db 79 CAGCTACAAA 70

RESULT 15

US-08-455-244-4/c  
Sequence 4, Application US/08455244  
Patent No. 5789214  
GENERAL INFORMATION:  
APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
NUMBER OF SEQUENCES: 106  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,244  
FILING DATE: 31-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/181,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
APPLICATION NUMBER: US 07/678,378  
FILING DATE: 1-APR-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT 1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
US-08-455-244-4

Query Match 10.3%; Score 159.2; DB 1; Length 900;  
Best Local Similarity 61.1%; Pred. No. 1e-29;  
Matches 336; Conservative 0; Mismatches 193; Indels 21; Gaps 4;

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Db 544 AACAAATATCATTTGGTTTTTATCACAGTACATGGTTTGTACATCCACCTTGTGTTTCA 485  
Qy 115 GCTGACTAGGACATTCACCAATTTATTTTCCCGTGCATTTGAATTCGCTGGCATTCCTC 174  
Db 484 ACTGTGCTGGGCATTGTTCTTAATAGGTCTGTGCACTGAGATTACGACATCTCC-- 427  
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Qy 475 ATGCTGCCACAGCGGTGTATGGACAGTTGTTGCTGCTACCTCGATAGTGGCAGCATAAGTGA 534



GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: June 17, 2005, 19:35:47 ; Search time 1001.49 Seconds  
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Title: US-10-051-307-2

Perfect score: 1598

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Gapop 10.0, Gapext 1.0

Searched: 6054689 seqs, 3103772919 residues

Total number of hits satisfying chosen parameters: 12109378

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Published Applications NA:\*

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- 26: /cgn2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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3	1482.2	92.8	1595	13	US-10-051-307-1
4	1482.2	92.8	1595	21	US-10-903-948-1
5	1334.4	83.5	1546	13	US-10-051-307-3
6	1334.4	83.5	1546	21	US-10-903-948-3
7	291.2	18.2	510	17	US-10-341-961A-371

c 8	186.8	11.7	735	9	US-09-938-842A-2118	Sequence 2118, Ap
c 9	186.8	11.7	735	11	US-09-938-842A-2118	Sequence 2118, Ap
c 10	186.8	11.7	950	9	US-09-770-445-334	Sequence 334, Ap
c 11	168.8	10.6	875	18	US-10-636-396-4	Sequence 4, Appli
c 12	168.8	10.6	875	19	US-10-636-396-4	Sequence 4, Appli
c 13	161.2	10.1	909	18	US-10-424-599-103619	Sequence 103619, A
c 14	158.4	9.9	1956	18	US-10-424-599-36321	Sequence 36321, A
c 15	137.2	8.6	1173	18	US-10-424-599-7736	Sequence 7736, Ap
c 16	136.8	8.6	717	15	US-10-259-165-389	Sequence 389, Ap
c 17	136.8	8.6	720	15	US-10-259-165-41	Sequence 41, Appl
c 18	134.6	8.4	1006	19	US-10-437-963-86607	Sequence 86607, A
c 19	129	8.1	901	18	US-10-424-599-7737	Sequence 7737, Ap
c 20	124.2	7.8	994	19	US-10-767-701-13563	Sequence 13563, A
c 21	120.6	7.5	425	20	US-10-425-115-29028	Sequence 29028, A
c 22	120.4	7.5	1215	20	US-10-425-115-10107	Sequence 10107, A
c 23	119.4	7.5	911	18	US-10-425-114-27634	Sequence 27634, A
c 24	118.6	7.4	696	15	US-10-259-165-353	Sequence 353, App
c 25	118.6	7.4	699	15	US-10-259-165-109	Sequence 109, App
c 26	118.6	7.4	1052	19	US-10-437-963-89569	Sequence 89569, A
c 27	117.8	7.4	905	20	US-10-425-115-10106	Sequence 10106, A
c 28	116.4	7.3	1189	20	US-10-425-115-47685	Sequence 47685, A
c 29	115.8	7.2	1020	15	US-10-259-165-571	Sequence 571, App
c 30	115.8	7.2	1020	17	US-10-260-238-3136	Sequence 3136, Ap
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c 33	109.4	6.8	805	17	US-10-260-238-4061	Sequence 4061, Ap
c 34	108.2	6.8	922	17	US-10-260-238-4067	Sequence 4067, Ap
c 35	106.4	6.6	634	20	US-10-425-115-10104	Sequence 10104, A
c 36	105.6	6.6	808	9	US-09-966-881-46	Sequence 46, Appl
c 37	101.6	6.4	633	15	US-10-259-165-532	Sequence 532, App
c 38	101.6	6.4	633	17	US-10-260-238-5182	Sequence 5182, Ap
c 39	99.8	6.2	3630	19	US-10-437-963-16245	Sequence 16245, A
c 40	97	6.1	1950	9	US-10-437-963-59877	Sequence 59877, A
c 41	94.2	5.9	343	9	US-09-770-791-806	Sequence 806, App
c 42	90.8	5.7	889	19	US-10-437-963-15621	Sequence 15621, A
c 43	90.6	5.7	621	14	US-10-175-389-9	Sequence 9, Appli
c 44	89.2	5.6	621	14	US-10-175-389-1	Sequence 1, Appli
c 45	86.4	5.4	1338	20	US-10-425-115-19747	Sequence 19747, A

#### ALIGNMENTS

#### RESULT 1

US-10-051-307-2  
; Sequence 2, Application US/10051307  
; Publication No. US20020170095A1  
; GENERAL INFORMATION:  
; APPLICANT: DAI, ZIYU  
; APPLICANT: HOOKER, BRIAN S.  
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF  
; FILE REFERENCE: 059440/0141  
; CURRENT APPLICATION NUMBER: US/10/051,307  
; PRIOR FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,224  
; PRIOR FILING DATE: 2001-01-23  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: Patent In Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 1598  
; TYPE: DNA  
; ORGANISM: Solanum tuberosum  
US-10-051-307-2

Query Match 100.0%; Score 1598; DB 13; Length 1598;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1598; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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Db 1 GTAATACGACTCCTACTATAGGCGACGGTGTCTGACGCCCGGGCTGTATCTTTGTTGA 60

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Db 121 CAAATGTGTGTAACAAGATTGTTACATCTCTCGGGTACTTTAAAGCTGACTAGGACATTCAC 180
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## RESULT 2

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US-10-903-948-2
; Sequence 2, Application US/10903948
; Publication No. US20050005324A1
; GENERAL INFORMATION:
; APPLICANT: DAI, ZIYU
; APPLICANT: SHI, LIPANG
; APPLICANT: HOOKER, BRIAN S.
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF
; FILE REFERENCE: 059440/0141
; CURRENT APPLICATION NUMBER: US/10/903,948
; CURRENT FILING DATE: 2004-07-30
; PRIOR APPLICATION NUMBER: US/10/051,307
; PRIOR FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,224
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1598
; TYPE: DNA
; ORGANISM: Solanum tuberosum
US-10-903-948-2
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Query Match 100.0%; Score 1598; DB 21; Length 1598;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 1598; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 GTAATACGACTCAGCTATATAGGCGACGCGTGGTCGACGGCCCGGCTGGTATCTTTGTTGA 60
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; Sequence 1, Application US/10051307				
; Publication No. US20020170095A1				
; GENERAL INFORMATION:				
; APPLICANT: DAI, ZIYU				
; APPLICANT: SHI, LIFANG				
; APPLICANT: HOOKER, BRIAN S.				
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF				
; FILE REFERENCE: 059440/0141				
; CURRENT APPLICATION NUMBER: US/10/051,307				
; CURRENT FILING DATE: 2002-01-22				
; PRIOR APPLICATION NUMBER: 60/263,224				
; PRIOR FILING DATE: 2001-01-23				
; NUMBER OF SEQ ID NOS: 14				
; SOFTWARE: PatentIn Ver. 2.1				
; SEQ ID NO 1				
; LENGTH: 1595				
; TYPE: DNA				
; ORGANISM: Solanum tuberosum				
US-10-051-307-1				
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Matches 1546; Conservative    0; Mismatches    48; Indels    5; Gaps    3;				
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Q	y	121	CAAAATGGGTACAAGGATTTGTTACATCTCTCCGGGTACTTTAAGCTGACTAGGACATTCAC	180
D	b	121	CAAAATGGGTACAAGGATTTGTTACATCTCTCCGGGTACTTTAAGTTGACACAGGCAATTCAC	180
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D	b	181	CATTATATTTGCGGTGCATTGAAATTTGTTGGCATTTCCTCCACTTTGGATTAGTCGGGG	240
Q	y	241	CGAAAGTCATCGGTATATTAATCCATCAATAAAGAAATGTCCCAGAAATCTTAAGTTGT	300
D	b	241	CGAAAGTCATCGGTATATTAATCCATCAATAAAGAAATGTCCCAGAAATCTTAAGTTGT	300
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Qy |  
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Db 599 AGGGAGAAAACAAAAGAGATCTCAAGTAGCCCATGTTTGTGGAAATTTATATGTGACA 658  
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Db 719 CGTATATATAGCAATATCATCTTTGACTAATTAATAAGCAATATATTAACAATATCAT 778  
Qy 781 TTGTTAAACGTTGAGTGGAAAATGTATAAGAGCCGCTAATTAATTAATTTATGA 840  
Db 779 TTGTTAAACGTTGAGTGGAAAATGTATAAGAGCCGCTAATTAATTAATTTATGA 838  
Qy 841 ATATAGCCTATAGTTACAAGTTAACTTTATTTGGTGATAACTTTGACATATAAATCTGT 900  
Db 839 ATATAGCCTATAGTTACAAGTTAACTTTATTTGGTGATAACTTTGACATATAAATCTGT 898  
Qy 901 AACGTGACGGAATTTTCTTAAACCTAAATATTAATAAGAGCACTATTTTCACTTTTCG 960  
Db 899 AACGTGACGGAATTTTCTTAAACCTAAATATTAATAAGAGCACTATTTTCACTTTTCG 958  
Qy 961 TGGCCAAAGTCTCTTGCACTATCTATGATGCCCCATTTTATCTTTTATCGTCTAGCCCTC 1020  
Db 959 TGGCCAAAGTCTCTTGCACTATCTATGATGCCCCATTTTATCTTTTATCGTCTAGCCCTC 1018  
Qy 1021 TAGGTACACGTTTGAACATAAATAATCATAAAAATTTGAAGATAAATAATAGTTTATTTT 1080  
Db 1019 TAGGTACACGTTTGAACATAAATAATCATAAAAATTTGAAGATAAATAATAGTTTATTTT 1078  
Qy 1081 TTCAATATTACGTTATGATCATTTTGTAGATCAATCTGAATATTAATAAGAGCACTTTTCACTTTTCG 1140  
Db 1079 TTCAATATTACGTTATGATCATTTTGTAGATCAATCTGAATATTAATAAGAGCACTTTTCACTTTTCG 1138  
Qy 1141 TTTAAATATCAACACCATTTCTGCTAAATGGGGAAGTCTATGTGATTCGTTGGCAAGT-GTTT 1199  
Db 1139 TTTAAATATCAACACCATTTCTGCT--AGGGGAAGTCTATGTGATTCGTTGGCAAGTGGTTT 1196  
Qy 1200 GATTATTTCTAGTCTAGATTCGAGTCACAACTTTTGTAGTCAAAATATCTATTAAAGAAC 1259  
Db 1197 GATTATTTCTAGTCTAGATTCGAGTCACAACTTTTGTAGTCAAAATATCTATTAAAGAAC 1256  
Qy 1260 CCTATTGATGCAAAATATCTATTAAAGAACCCCTATTCTATATCTTTATTTTACGAT 1319  
Db 1257 CCTATTGATGCAAAATATCTATTAAAGAACCCCTATTCTATATCTTTATTTTACGAT 1316  
Qy 1320 CGGAGCATGGATATATTACTAAATTTAAATTTGGGAGGAATTTGATCGCAAGCCATC 1379  
Db 1317 CGGAGCATGGATATATTACTAAATTTAAATTTGGGAGGAATTTGATCGCAAGTCATC 1376  
Qy 1380 AAGCTTATCGTCGATCCACATTTAGGATAACGTTAGTATGGCTGTTTTTGTAGAGAAACAAGT 1439  
Db 1377 AAGCTTATCGTCGATCCACATTTAAATAAAGCTTAGTATGGCTGTTTTTGTAGAGAAACAAGT 1436  
Qy 1440 GGATCATGTACAATTTAGTTTAAATAATATCTCTTATAAATACCTGTCTATCCCTCTTAAA 1499  
Db 1437 GGATCATGTATAATTTTAAATTTTAAATAATATCTCTTATAAATATCTATATATACCTCTTAAA 1496  
Qy 1500 CCAATAATCATCTAACACACAAAATATATAAATTTAGATTTCCCTTAAAGAAATTCGAAATTA 1559  
Db 1497 CTAATGCAATCTAACACAAAATATATAAATTTAGATTTCTTTAAAGAAATTCGAAATTA 1556  
Qy 1560 ATGAGGCAATAAGTCTATGGTGAAGTTGGTCTTTTC 1598  
|

Db 1557 ATGAGGCAATAAAGTCTATGGTGAAGTTGGTGTCTTC 1595

RESULT 5

US-10-051-307-3  
; Sequence 3, Application US/10051307  
; Publication No. US20020170095A1  
; GENERAL INFORMATION:  
; APPLICANT: DAI, ZIYU  
; APPLICANT: SHI, LIFANG  
; APPLICANT: HOOKER, BRIAN S.

; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF  
; FILE REFERENCE: 059440/0141  
; CURRENT APPLICATION NUMBER: US/10/051,307  
; CURRENT FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,224  
; PRIOR FILING DATE: 2001-01-23  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 3  
; LENGTH: 1546  
; TYPE: DNA  
; ORGANISM: Solanum tuberosum  
; FEATURE:  
; NAME/KEY: modified\_base  
; LOCATION: (1248)  
; OTHER INFORMATION: a, t, c or g

US-10-051-307-3

Query Match 83.5%; Score 1334.4; DB 13; Length 1546;  
Best Local Similarity 93.8%; Pred. No. 2.3e-283;  
Matches 1456; Conservative 0; Mismatches 87; Indels 10; Gaps 6;

Qy 49 ATCTTTGTTTGAAAAAATTTGAAAAAGACGTAGACACACATGGACCTTGGGTGCAACAAT 108  
Db 1 ATCTTTGTTTGAAAAAATTTGAAAAAGACGTAGACACACATGGACCTTGGGTGCAACAAT 60  
Qy 109 ATTGTGTCTCTCAAAATGTGTACAAGATTTGTGTACATCTCTCGGGTACTTTTAGCTCAC 168  
Db 61 ATTGTGTCTCTCAAAATGTGTACAAGATTTGTGTACATCTCTCGGGTACTTTTAGCTCAC 120  
Qy 169 TAGGACATTCACCAATTTATATTTTCCCGTGCATTTGAATTTGTGGCATTTCCCTCCACATTG 228  
Db 121 TAGGACATTCACCAATTTATATTTTCCCGTGCATTTGAATTTGTGGCATTTCCCTCCACATTG 180  
Qy 229 GATTAGTCGGGGCAAAAGTCATCGGTATATTAATTCATCAACTAAAGAAATGTCCACAGA 288  
Db 181 GATTAGTCGGGGCAAAAGTCATCGGTATATTAATTCATCAACTAAAGAAATGTCCACAGA 240  
Qy 289 AATCTAAGTTTGTGAATCTGTCCAAAGGGTACTCGGCTAGGCTGTTTGGTGGTTTGCCCC 348  
Db 241 AATCTAAGTTTGTGAATCTGTCCAAAGGGTACTCGGCTAGGCTGTTTGGTGGTTTGCCCC 300  
Qy 349 ACCCGGTGCATCTGAGGACACACCAACAATCACCAGTCATGCAGCAACCTCTACAGCAC 408  
Db 301 ACCCGGTGCATCTGAGGACACACCAACAATCACCAGTCATGCAGCAACCTCTACAGCAC 360  
Qy 409 CACCGAAGTTACATCCAGTAGACGCCCATATACGTGCCATCGTAGTGCCTCTAGGCGCAT 468  
Db 361 CATCGAAGTTACATCCAGTAGACGCCCATATACGTGCCATCGTAGTGCCTCTAGGCGCAT 420  
Qy 469 CAATGACCCACATTTGGCCTCGATCGAGACGTGGGCAACCCCTATC-GGGTCGATGCCG 527  
Db 421 CAATGACCCACATTTGGCCTCGATCGAGACGTGGGCAACCCCTATCGGGGTTCATGCTG 480  
Qy 528 CCCAAACGATGTATGGACAGTTTGTGGCGGTACTCTCGATAGTAGACAGCATAGTGAAGT 587  
Db 481 CCCAGACGGTATATGGACAGTTTGTG--CGTACCTCGATAGTAGGACGATAGTGAAGT 538  
Qy 588 CACAAAACGAGGAGGAGAAACCAAAAGAAAGATCTCAAGTAGCCCAATGTTTGTGAAT 647  
Db 539 CACAAAACGAGGAGGAGAAACCAAAAGAAAGATCTCAAGTAGCCCAATGTTTGTGAAT 598



Db 719 ATTCAATATGATTTGGTAAACGTTGAGTGGCAAAATGTATAAGACCCGCTTAATATT 778  
Qy 828 AATTATTATTGAATATAGCCTATAGTATCAAGTTAACTTTATTGGTGATACTTTGAC 887  
Db 779 AATTATTATTGAATATAGACTATAGTATCAAGTGAACCTTTATTGGTGATATTGGAC 838  
Qy 888 ATATAAACTCTGTAACGTGACGGAATTTTCTTAAAACTAAATATTAAAAAGCAGCTATT 947  
Db 839 ATATAAACTCTGTAACGTGACGGAATTTTCTTAAAACTAAATATTAAAAAGCAGCTATT 898  
Qy 948 TTCAATTTTTCGGGCCAAGTCTCTGATACCTTATCTATGCCATTTTACTTTTAT 1007  
Db 899 TTAATATTTTTCGGGCCAAGTCTCTGATACCTTATCTATGCCATTTTACTTTTAT 958  
Qy 1008 CGTTCTAGCCTTCVAGGTACACGTTTGAACATAAAAAATCATAAAAATTTGAAAGTAAAAA 1067  
Db 959 CGTTCTAGCCTTCVAGGTACACGTTTGAACATAAAAAATCATAAAAATTTGAAAGTAAAAA 1018  
Qy 1068 TTAGTTTTTTTTTTCATATTAATCTCGTATGATCAATTTGTTAGATCAATCTGAAATATAC 1127  
Db 1019 TTAG- - - TTTTCTTCAATATTAATCTCGTATGATCAATTTGTTAGATCAATCTGAAATATAC 1075  
Qy 1128 AAACCATCTGATTTTAAATCAACATCTGCTTAATGCGGAAGTCTAT- GTGATTC 1186  
Db 1076 AAATCATCTGATTTTAAATCAACATCTGCTTAATGCGGAAGTCTAT- GTGATTC 1135  
Qy 1187 GTGCAAGTGTTCGA- TTATTTCTAGTCTAGTGGAGTCAACATTTTATGTCGAATAT 1245  
Db 1136 GTGCAAGTGTTCGA- TTATTTCTAGTCTAGTGGAGTCAACATTTTATGTCGAATAT 1195  
Qy 1246 CTATTTAAAGAACCCCTATTGATGCAATATCTATTTAAAGAACCCCTATTTCATACCTTA 1305  
Db 1196 CTATTTAAAGAACCCCTATTGATGCAATATCTATTTAAAGAACCCCTATTTCATACCTTA 1253  
Qy 1306 TTTATTTTACGATCGGAGATGATATATTTACTAATTTAAATATAATTTGGAGGAATTG 1365  
Db 1254 TTTATTTTACGATCGGAGATGATATATTTACTAATTTAAATATAATTTGGAGGAATTG 1313  
Qy 1366 ATGACAAGCATCAAGCTTATCGTCGATCCACATTTAGGATAAGCTTAGTATGCTGCTTT 1425  
Db 1314 ATGACAAGCATCAAGCTTATCGTCGATCCACATTTAGGATAAGCTTAGTATGCTGCTTT 1373  
Qy 1426 TTAGAGAAACAGTGGATCATGTACAATTTAGTTTAAAAATATCTCTATAAAATACCTGT 1485  
Db 1374 TTAGAGAAACAGTGGATCATGTACAATTTAGTTTAAAAATATCTCTATAAAATATCTAT 1433  
Qy 1486 CTATCCCTCTTAAACCAATATCATCTAACACAAAAATATAAACTTAGATTCCTTAAAGA 1545  
Db 1434 ATATACCTCTTAAACCAATATCATCTAACACAAAAATATAAACTTAGATTCCTTAAAGA 1493  
Qy 1546 AATTGCAGAAATTAATGGAGCAAAATAGTCTATGTTGAAGTTGGTTGCTTTC 1598  
Db 1494 AATTGCAGAAATTAATGGAGCAAAATAGTCTATGTTGAAGTTGGTTGCTTTC 1546

## RESULT 7

US-10-341-961A-371/c  
; Sequence 371, Application US/10341961A  
; Publication No. US2004000678A1  
; GENERAL INFORMATION:  
; APPLICANT: Boyce Thompson Institute for Plant Research, Inc.  
; APPLICANT: Crasta, Oswald  
; APPLICANT: Swirsky, Peter  
; APPLICANT: Mysore, Kiran  
; APPLICANT: Folkerts, Otto  
; APPLICANT: Martin, Gregory  
; APPLICANT: Ekengren, Sophia  
; TITLE OF INVENTION: PLANT DEFENSE-RELATED GENES REGULATED IN RESPONSE TO PLANT-PATHOGEN  
; FILE REFERENCE: BTI.67A2  
; CURRENT APPLICATION NUMBER: US/10/341.961A

## RESULT 8

US-09-938-842A-2118/c  
; Sequence 2118, Application US/09938842A  
; Patent No. US20020160378A1  
; GENERAL INFORMATION:  
; APPLICANT: Harper, Jeff  
; APPLICANT: Kreps, Joel  
; APPLICANT: Wang, Xun  
; APPLICANT: Zhu, Tong  
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING  
; FILE REFERENCE: SCLP1300-3  
; CURRENT APPLICATION NUMBER: US/09/938.842A  
; CURRENT FILING DATE: 2001-08-24  
; PRIOR FILING DATE: 2000-08-24  
; PRIOR FILING DATE: 2000-08-24  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR FILING DATE: 2001-06-22  
; NUMBER OF SEQ ID NOS: 5379

; CURRENT FILING DATE: 2003-01-14  
; PRIOR APPLICATION NUMBER: 60390249  
; PRIOR FILING DATE: 2002-06-20  
; PRIOR APPLICATION NUMBER: 60261029  
; PRIOR FILING DATE: 2001-01-11  
; PRIOR APPLICATION NUMBER: 60348792  
; PRIOR FILING DATE: 2002-01-14  
; NUMBER OF SEQ ID NOS: 395  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 371  
; LENGTH: 510  
; TYPE: DNA  
; ORGANISM: Lycopodium esculentum  
US-10-341-961A-371

Query Match 18.2%; Score 291.2; DB 17; Length 510;  
Best Local Similarity 78.1%; Pred. No. 6.5e-54;  
Matches 350; Conservative 0; Mismatches 98; Indels 0; Gaps 0;  
Qy 49 ATCTTTGTTTGAATAAATTTGAAAAAGAACCTAGGACCAATGGACCTTTGGGTGCAACAAT 108  
Db 448 ATCTTTGTTTGAATAAATTTGAAAAAGAACCTAGGACCAATGGACCTTTGGGTGCAACAAT 389  
Qy 109 ATTGTTGTTCTCCAAATGTTGTTACAGGATTTTACATCTCCGGGTACTTTAAAGCTGAC 168  
Db 388 ATTGTTGTTCTCCGAATGTTGTACAAGGGTGTGTACATCTCCAGGTACCCCTAAGTGAAC 329  
Qy 169 TAGGACATTCACCAATTTATATTTGCGTGCATTAATTTGTTGTCATTTTCCCTCCACTTG 228  
Db 328 CAGGGCAATCACCCTTTATATTTGCGTGCATTAATTTGTTGTCATTTTCCAGGGCAAG 269  
Qy 229 GATTAGTGGGGGAAAGTCTATCGGTATATTAATCCATCAACTAAAGAAATGTCCAGAA 288  
Db 268 GCTTAGTGGGCCAAAAGACATAGGATGTTGAATCCATCAATAACAGAAATATCCCAA 209  
Qy 289 AATCTAAGTTTGTAACTGTTCCAAAGCGTACTCGGCTAGGGTGTGTTGGTGGTGGTGGCC 348  
Db 208 AATCTAAGTTTACCAAACTGTTTCAAAGCGTATTCAGCTAAGGTGTTTGGTGGTGGTGGCC 149  
Qy 349 ACCGGTGCATCTCAGGACACACCAACATCACCAGTCATGACGACCTTACACCTTACACGAC 408  
Db 148 ATCTTTGCAATCAGAGCTCCACCAACATCAGCTGTCGACCAACCTTCCAGGAC 89  
Qy 409 CACCGAAGTTTACATCCAGTACGACCCCATATAGTGCATCGTAGTGCCTTACGGCCGAT 468  
Db 88 CATCAAGTTGCAATTTAGTAGGACCCCAATATAGTGCATTTTAGTGCAGGTGGGGGCC 29  
Qy 469 CAATGACCCCACTTTGGCTTCGATCGAG 496  
Db 28 AAAACCAACCAACTCTGACCTCTCTCGAG 1

```
; SEQ ID NO 2118
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-2118

Query Match      11.7%; Score 186.8; DB 9; Length 735;
Best Local Similarity 62.4%; Pred. No. 7.5e-31;
Matches 367; Conservative 0; Mismatches 202; Indels 19; Gaps 4;

QY  46  GGTATCTTTGTTTGAAGAAATTTGAAAGAAAGTAGGACCAATG-----GACCTTGGG 99
DB  586  GGCATCTCTGCTTAAAGAAATCTTGAGTACTCAGTATCGTACATGATCCCTGACCGTTGG 527
QY  100  TGCAACAATATTGTTGCTCCCAATGTTGGTACAGGATTTGATCATCTCCGGTACTTT 159
DB  526  TACAACAGTATTGGTTGCTCTGAAATACAGTACACGGGTTGTTGATCCACCTGGGGTTC 467
QY  160  TAAGCTGACTAGGACATTCACCAATTATATTTGCGGTGCATTGAATTTGTTGGCATTTCC 219
DB  466  TCAACACGTTTGGACATTTGTCGTTTATGTTCTGCGGTACATAGTATCCGATGGCAGTTTC- 408
QY  220  CTCCACTTGGATTAGTTCGGGGCGAAAGTCATCGGTATATTAATCCATCAACTAAAGAAA 279
DB  407  -----GAACTAGTTGGGCTAAACTCCATAGGTATGTTAAATCCATCGACAAGTGAGA 356
QY  280  TGTCCAGAAATCTAAGTTGTTGAATCTGTTCCAGGCGTACTCCGGTAGGGTGTGTTGGTG 339
DB  355  TATCGTAGAAGTCTAAGTTGTTGAATTTGTTTCAAGCGTACTCAGCCAACTGTTTGGTG 296
QY  340  GTTTGCCCCACCCGGTGCACTCCAGGACACCAACCAATCACCAGTCATGCACGAACCTC 399
DB  295  GCTGTCCCGCAGCAGTACATTTGGAGTCCACATCGCAGTCACCATTTGGCATCGGCCAC 236
QY  400  TACCAGCACCAACGAAAGTTACATCCAGTACGACCCCATATAGTGCCATCGTAGTGCCTCC 459
DB  235  GACCTGAGGAGTCAAAAGTTTACAATTTGGTCTTACCCCAATCGTGCCATTTTAGTGCCGG 176
QY  460  TAGGGCGCATCAATGACCCACATTTGGCTCGATCGAGACGTCGGGACCGCTATCGGGT 519
DB  175  CCGGACATCTAGCTCCATGATTTGGCCAGCATCTAGACGTCGGGCACCTCC--AGGGCT 118
QY  520  CGATGCCGCCCAACCATGTATGGACAGTTGTTGGCGGTACTCTCATAGTGACAGCATAA 579
DB  117  TCGGCGACCCACACGCTGTAACATTTGGTT--TAGGATTTCAATGTGGCGCTGTT 60
QY  580  GTGAAAGTCAAAAAGCCAGAGGAGGAGAAACCAAAAGAGATCTCAAG 627
DB  59  GCGGTGGAGATGAGCAAAAAGTCCGGAATATATGAAAGTAGAGACCAAG 12
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RESULT 9
US-09-938-842A-2118/c
; Sequence 2118, Application US/09938842A
; Publication No. US20040009476A9
; GENERAL INFORMATION:
; APPLICANT: Harper, Jeff
; APPLICANT: Kreps, Joel
; APPLICANT: Wang, Xun
; APPLICANT: Zhu, Tong
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
; TITLE OF INVENTION: SAME, AND METHODS OF USE
; FILE REFERENCE: SCRIPT300-3
; CURRENT APPLICATION NUMBER: US/09/938,842A
; CURRENT FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: US 60/227,866
; PRIOR FILING DATE: 2000-08-24
; PRIOR APPLICATION NUMBER: US 60/264,647
; PRIOR FILING DATE: 2001-01-16
; PRIOR APPLICATION NUMBER: US 60/300,111
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 5379
; SEQ ID NO 2118
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; LENGTH: 735
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-2118

Query Match      11.7%; Score 186.8; DB 11; Length 735;
Best Local Similarity 62.4%; Pred. No. 7.5e-31;
Matches 367; Conservative 0; Mismatches 202; Indels 19; Gaps 4;

QY  46  GGTATCTTTGTTTGAAGAAATTTGAAAGAAAGTAGGACCAATG-----GACCTTGGG 99
DB  586  GGCATCTCTGCTTAAAGAAATCTTGAGTACTCAGTATCGTACATGATCCCTGACCGTTGG 527
QY  100  TGCAACAATATTGTTGCTCCCAATGTTGGTACAGGATTTGATCATCTCCGGTACTTT 159
DB  526  TACAACAGTATTGGTTGCTCTGAAATACAGTACACGGGTTGTTGATCCACCTGGGGTTC 467
QY  160  TAAGCTGACTAGGACATTCACCAATTATATTTGCGGTGCATTGAATTTGTTGGCATTTCC 219
DB  466  TCAACACGTTTGGACATTTGTCGTTTATGTTCTGCGGTACATAGTATCCGATGGCAGTTTC- 408
QY  220  CTCCACTTGGATTAGTTCGGGGCGAAAGTCATCGGTATATTAATCCATCAACTAAAGAAA 279
DB  407  -----GAACTAGTTGGGCTAAACTCCATAGGTATGTTAAATCCATCGACAAGTGAGA 356
QY  280  TGTCCAGAAATCTAAGTTGTTGAATCTGTTCCAGGCGTACTCCGGTAGGGTGTGTTGGTG 339
DB  355  TATCGTAGAAGTCTAAGTTGTTGAATTTGTTTCAAGCGTACTCAGCCAACTGTTTGGTG 296
QY  340  GTTTGCCCCACCCGGTGCACTCCAGGACACCAACCAATCACCAGTCATGCACGAACCTC 399
DB  295  GCTGTCCCGCAGCAGTACATTTGGAGTCCACATCGCAGTCACCATTTGGCATCGGCCAC 236
QY  400  TACCAGCACCAACGAAAGTTACATCCAGTACGACCCCATATAGTGCCATCGTAGTGCCTCC 459
DB  235  GACCTGAGGAGTCAAAAGTTTACAATTTGGTCTTACCCCAATCGTGCCATTTTAGTGCCGG 176
QY  460  TAGGGCGCATCAATGACCCACATTTGGCTCGATCGAGACGTCGGGACCGCTATCGGGT 519
DB  175  CCGGACATCTAGCTCCATGATTTGGCCAGCATCTAGACGTCGGGCACCTCC--AGGGCT 118
QY  520  CGATGCCGCCCAACCATGTATGGACAGTTGTTGGCGGTACTCTCATAGTGACAGCATAA 579
DB  117  TCGGCGACCCACACGCTGTAACATTTGGTT--TAGGATTTCAATGTGGCGCTGTT 60
QY  580  GTGAAAGTCAAAAAGCCAGAGGAGGAGAAACCAAAAGAGATCTCAAG 627
DB  59  GCGGTGGAGATGAGCAAAAAGTCCGGAATATATGAAAGTAGAGACCAAG 12
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```
RESULT 10
US-09-770-445-334/c
; Sequence 334, Application US/09770445
; Patent No. US20020023281A1
; GENERAL INFORMATION:
; APPLICANT: Goriach, Jorn
; APPLICANT: An, Yong-Qiang
; APPLICANT: Hamilton, Carol M.
; APPLICANT: Price, Jennifer L.
; APPLICANT: Raines, Tracy M.
; APPLICANT: Yu, Yang
; APPLICANT: Rameaka, Joshua G.
; APPLICANT: Page, Amy
; APPLICANT: Matthew, Abraham V.
; APPLICANT: Ledford, Brooke L.
; APPLICANT: Woessner, Jeffrey P.
; APPLICANT: Haas, William David
; APPLICANT: Garcia, Carlos A.
; APPLICANT: Kricker, Maja
; APPLICANT: Slader, Ted
; APPLICANT: Davis, Keith R.
; APPLICANT: Allen, Keith
; APPLICANT: Hoffman, Neil
```



```
; APPLICANT: Hurban, Patrick
; TITLE OF INVENTION: Expressed Sequences of Arabidopsis
; FILE REFERENCE: 2023US (PARA-012PRV)
; CURRENT APPLICATION NUMBER: US/09/770,445
; PRIOR FILING DATE: 2001-01-26
; PRIOR APPLICATION NUMBER: US 60/178,472
; PRIOR FILING DATE: 2000-01-27
; NUMBER OF SEQ ID NOS: 999
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 334
; LENGTH: 950
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-770-445-334

Query Match      11.7%; Score 186.8; DB 9; Length 950;
Best Local Similarity 62.4%; Pred. No. 8.4e-31;
Matches 367; Conservative 0; Mismatches 202; Indels 19; Gaps 4;

Qy 46 GGTATCTTTGTTGAAAAAATTGAAAAAGACGTAGGACACATG-----GACCTTGGG 99
Db 594 GGCATCTCTGCTTAAAGAATCTTGAGTACTCAGTATCGCTACATGATCCCTGACCGTTCG 535
Qy 100 TGCACAAATATGTTGCTCCTCAATATGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 159
Db 534 TACAACAGTATGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 475
Qy 160 TAAGCTGACTAGGACATTCACCATTTATTTGCGTGCATTTGTTGTTGTTGTTGTTGTTGTT 219
Db 474 TCAACAGCTTTGGACATTTGCTTTTATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 416
Qy 220 CTCCACTTTGATTTAGTTCGGGGGAAAGTCTCGGTATATTAATCCATCAACTAAAGAA 279
Db 415 -----GAAGTATGTTGGGCTAACTCCATAGTATGTTAAATCCATCGACAGTGA 364
Qy 280 TGTCCCGAATACTAAGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 339
Db 363 TATCGTAGAGTCTAAGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 304
Qy 340 GTTTGCCCCCAGCTGCTGAGGACACCAATCAATCAATCAATCAATCAATCAATCAATCAATCA 399
Db 303 GCTGTCCCCAGCAGTACATTTGGAGTCCACACTGCAGTCCACAGTTGGCATCGGCCAC 244
Qy 400 TACCAGCACACCAGAAAGTTACATCCAGTACGACCCCATATATATATATATATATATATATAT 459
Db 243 GACCTGAGGAGTCAAGTTACATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 184
Qy 460 TAGCGGCATCAATGACCCACATTTGGCTCGATCGAGACGTCGCGGCACCGCTATCGGGT 519
Db 183 CCGCGACATCTAGCCTCCATGATTTGGCCAGCATCTAGAGCTCGGCCACCTCC--AGGGCT 126
Qy 520 CGATGCGGCCCAACAGATGATGACAGTTGTTGGCGGTACTCTGATAGTGACAGCATAA 579
Db 125 TCGCGGACGCCACACCGGTGAATACATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 68
Qy 580 GTGAAAGTCAAAAGCCAGAGGAGAAACCAAAAGAGATCTCAAG 627
Db 67 GCGGTGAGATGACAAAAGTCCGGAATATGAAAGTAGAGACCAAG 20
```

```
RESULT 11
US-10-636-396-4/c
; Sequence 4, Application US/10636396
; Publication No. US20040073971A1
; GENERAL INFORMATION:
; APPLICANT: Bidney, Dennis L.
; APPLICANT: Crasta, Oswald R.
; APPLICANT: Duwick, Jon
; APPLICANT: Hu, Xu
; APPLICANT: Lu, Guihua
; TITLE OF INVENTION: Sunflower Anti-Pathogenic Proteins and
; CURRENT FILING DATE: 2003-08-07
```

```
; FILE REFERENCE: 5718-90
; CURRENT APPLICATION NUMBER: US/10/636,396
; CURRENT FILING DATE: 2003-08-07
; PRIOR APPLICATION NUMBER: US/09/589,733C
; PRIOR FILING DATE: 2000-06-08
; PRIOR APPLICATION NUMBER: 60/140,646
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/162,904
; PRIOR FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 875
; TYPE: DNA
; ORGANISM: Helianthus annuus
US-10-636-396-4
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Query Match      10.6%; Score 168.8; DB 18; Length 875;
Best Local Similarity 61.3%; Pred. No. 7.5e-27;
Matches 309; Conservative 0; Mismatches 187; Indels 8; Gaps 2;

Qy 49 ATCTTTGTTTGAATAAATTGAAAAAGACGTAGGACACATGGACCTTGGGTGCAACAAT 108
Db 577 ATCTGGTCTTGAATAAATCTTGATAATCAGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 518
Qy 109 ATTGTTGCTCTCCAAATGTTGTTACAGGATTTTACATCTCTCGGGTACTTTTAAGCTGAC 168
Db 517 ACTGATCAGTTTGTACACGGTGCAGGGTTATTGCAACCCGAGGAGCCGTAACCTCAC 458
Qy 169 TAGGACATTCACCATTTATTTTCCGTTGCAATTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 228
Db 457 CAGGACACTGCGCATTTGATATCCGAGTACATGAGATACCCCGGTGCAACCC-----AT 404
Qy 229 GATTAGTTCGGGGGAAAGTCAATCGGTATATTAATCCATCAACTAAAGAAATGTTCCAGA 288
Db 403 TAGAATTTGGGTCTAAACACCATCGGCATTTGAATCCGTCCACAAGAAATGTCAAAGA 344
Qy 289 AATCTAAGTTGTTGAACTGGTCCAAAGGCTACTCGGTAGGGTGTGTTGGTGGTGGTGGTGGT 348
Db 343 AATCAAGATTTGTTGAATCTGGTTCAAAGGTTACTCGGCCAATGTTGTTGGTGGGTGTTGTT 284
Qy 349 ACCGGTGTGCTGAGGACACCAACAATCACAGTATGACAGAACTCTACAGCAC 408
Db 283 AGTTTGGCATTTGAGGAGACCGTTGCAATCACCGTCTGACACCTGCTCGCCAGAAC 224
Qy 409 CACGGAAGTTACATCCAGTACGACCCCATATATCGTCCATCGTAGTCCCTTAGCGCAT 468
Db 223 CATCAAAAGTTGCAATTTGGTTTCGGGGCCATATACGGGCTCTCTGTTGTTGTTGTTGTTGTT 164
Qy 469 CAATGACCCACATTTGGCTTCGATCGAGAGCTCGGGGACCGCCCTATCGGGTCTGATGCGC 528
Db 163 TTAAGACACAGTTTGGCTTGAAGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 106
Qy 529 CCAACGATCTATGACAGTTGTT 552
Db 105 CCAACGTTGATGACAGTTGTT 82
```

```
RESULT 12
US-10-636-026-4/c
; Sequence 4, Application US/10636026
; Publication No. US2004011761A1
; GENERAL INFORMATION:
; APPLICANT: Bidney, Dennis L.
; APPLICANT: Crasta, Oswald R.
; APPLICANT: Duwick, Jon
; APPLICANT: Hu, Xu
; APPLICANT: Lu, Guihua
; TITLE OF INVENTION: Sunflower Anti-Pathogenic Proteins and
; TITLE OF INVENTION: Genes and their Uses
; FILE REFERENCE: 5718-90
; CURRENT APPLICATION NUMBER: US/10/636,026
; CURRENT FILING DATE: 2003-08-07
```



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; PRIOR APPLICATION NUMBER: US/09/589,733C
; PRIOR FILING DATE: 2000-06-08
; PRIOR APPLICATION NUMBER: 60/140,646
; PRIOR FILING DATE: 1999-06-23
; PRIOR APPLICATION NUMBER: 60/162,904
; PRIOR FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: FASTSEQ for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 875
; TYPE: DNA
; ORGANISM: Helianthus annuus
US-10-636-026-4

```

Query Match	10.6%	Score 168.8	DB 19	Length 875
Best Local Similarity	61.3%	Pred. No. 7.5e-27		
Matches 309	Conservative 0	Mismatches 187	Indels 8	Gaps 2
Qy	49	ATCTTTGTTTGAAAAAATTGGAAAGAACGTGAGGACCACATGGACCTTGGGTGCAACAAT	108	
Db	577	ATCTGGTCTTGA AAAACCTTGATAAATCAGTTGGTCCACAATTTCCAGAGTTGCAACAAT	518	
Qy	109	ATTGTTGCTCTCCAATATGGTCAAGGATGTTTACATCTCTCCGGGTACTTTTAAAGCTGCAC	168	
Db	517	ACTGATCAGTTTGTGTACACGGTGCAAGGGTTATTGCACCGCCAGGAGCCCGTAACTCAC	458	
Qy	169	TAGGACATTCACCAATTTATATTTCCGCGTGCAATGCAATTTGTGTGGCATTTCCCTCCACTTG	228	
Db	457	CAGGACACTCGGCCATTGATATCCGCAGTACATGAGATACCCCGGGTGCACCC-----AT	404	
Qy	229	GATTAGTCGGGGCGAAAGTCATCGGTATATTAAATCCATCAACTAAAGAAATGTCACAGA	288	
Db	403	TAGAAATTGGGTCTAAACACCATCGGCACATTTGAATTCGTCCAAAGAGAAATGTCAAGA	344	
Qy	289	AATCTAAGTTGTTGAACTGGTCCAAGGCGTACTCGGGCTAGGGGTGTTTGGTGGTTTGCCCC	348	
Db	343	AATCAAGATTGTTGAACTGGTTCAAAGCGTACTCGGCCAATGTTGTTGGGTGGGTACCAT	284	
Qy	349	ACCGGTGCACTGCAGGACACCAACAATCACCAGTCATGCAAGAACCTTACACAGCAC	408	
Db	283	AGTTTTGGCATTTGGAGGAGACCGTTGCAATCACCGGTCTGACACTGCTCGCCGCAGAAC	224	
Qy	409	CACCGAAGTTTACATCCAGTAGCAGCCCCATATACGTGGCCATTCGTAGTGCCTTAGCGCAT	468	
Db	223	CATCAAAAGTTGCAATTGGTTTCGGGGCCATATACGGGTCTCTGCTGTGCCAGCTCGGCGG	164	
Qy	469	CAATGACCCCACTTTGGCCCTCGATCGAGACGTCGGGCAACCGCCCTATTCGGGTTCGATGCCGC	528	
Db	163	TTAAAGACCAAGTTTGGCCCTGAGTTAAGTTGTCGGCCGCCACC--AGGCACCGCACCCAGC	106	
Qy	529	CCAAAACGATGTATGGACAGTTGTT	552	
Db	105	CCAAACGGTGTATGGACAGTTGTT	82	

RESULT 13  
US-10-424-599-103619/c  
; Sequence 103619, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:

```

; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Mole
; TITLE OF INVENTION: Plants and Uses Ther
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 103619
; LENGTH: 909
; TYPE: DNA

```

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; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_64586C.1
US-10-424-599-103619

```

Query Match	10.1%;	Score 161.2;	DB 18;	Length 909;
Best Local Similarity	61.1%;	Pred. No. 3.6e-25;		
Matches 314;	Conservative 0;	Mismatches 193;	Indels 7;	Gaps 31;
Qy	46	GGTATCTTTGTTTGAAAAATTTGAAAGAACGTAGGACACATGGACCTTTGGGTGCAAC	105	
Db	631	GGCACCTTTGCTTTGAAGAACTGGAATATACAGTGGGCCACACACTACCGGAATTCAC	572	
Qy	106	AATATTGTTGCTCTCCAAATTTGGTCAAGAAATTTACATCTCTCCGGGTACTTTAAGCT	165	
Db	571	AGTACTCGTCGGTTTTTCAAGACAGTGCAGGGTTGTTGCAACCTCTTGAGTCTTTAGCT	512	
Qy	166	GACTAGACAAATTCACCAATTTATATTTCCGTGTCATTTGAATTTGTGTGGCATTTCCCTCCAC	225	
Db	511	CACTAGGGCACTGTCCGTTAATGTCGCAGTGCA---GCTTATGCCAGTGTGTCATCCAT	455	
Qy	226	TTGGAATTAGTCGGGGCGAAAGTCATCGGTATATTTAAATCCATCAACTAAAGAAATGTCCC	285	
Db	454	TCG---AGGTTGGACTAAAGTCCATGGGCAGTTTAAACCCTCGACGAGGGAGATGTGCA	398	
Qy	286	AGAAATCTAAGATTGTTTGAACTGGTCCAGGCGTACTCGGCTAGGGTGTTTGGTGTGTTGC	345	
Db	397	AGAAGTCCAAATGTTTGAAACCGGTTTCAGGCGGTATTCAGCCAGGTTGTGGGAGGCGCAC	338	
Qy	346	CCCAACCGGTGCACTGCAGGACACCAACAATCAACAGTCATGCAAGAACCTCTACAG	405	
Db	337	CGTAAGCTTTGCACTCGAGGACACCCCGCAGTCACCGGTCTGGCATCCACCGCGGCGCG	278	
Qy	406	CACCAACGAATTACATCCAGTAGCACCCCATATACGTGGCATCGTAGTGCCTTAGCGG	465	
Db	277	AACCGTCGAATGTGCACCGGTTTGGGGCCCAACGCGGGGCCCCCTTTCGTTCTCTGAGGCA	218	
Qy	466	CATCAATGACCCCAATTTGGCTCTGATCGAGACGTCGGGGCACCCGCTTATCGGGTC-GATG	524	
Db	217	CGTCCACGGACCATGACTGCGCCCGGGTTTAAATTGCACGCCACCGCCACAGGCACAGG	158	
Qy	525	CCGCCCCAAACGATGTATGGAACAGTTGTGGCGGT	558	
Db	157	CAGCCCCAGACAGTGTATGTGCATCGGTTTGTGAT	124	

```

RESULT 14
US-10-424-599-36321/c
; Sequence 36321, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and
; TITLE OF INVENTION: Plants and Uses Thereof for P
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 36321
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(1956)
; OTHER INFORMATION: unsure at all n locations
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT MRT3847_132800C.1
US-10-424-599-36321

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Query Match 9.9%; Score 158.4; DB 18; Length 1956;  
Best Local Similarity 61.0%; Pred. No. 2.1e-24;  
Matches 317; Conservative 0; Mismatches 186; Indels 17; Gaps 3;

QY 45 TGGTATCTTTTGGAAAAATTCGAAAGAACCTAGGACCACA-----TGGACCTTGG 98  
DB 1338 TGGCACCTTATCCCTTGAAGAACCTTGAAGTGTGTGGGCCACACAGCTTCCCTTGGCCCATG 1279

QY 99 GTGCAACAATATGTGTCTCCAAATGTGTGTAAGGATTTGATCATCTCTCCGGGTACT 158  
DB 1278 GTGAGCAATACTCATTCGTCTTAAACACAGTGCAGGGTGTGTGCAATCCCCAGGTGCC 1219

QY 159 TTAAGTACTAGGACATTCACATTTATATTTCCGTGCATTTGAATGTGTGCATTTTC 218  
DB 1218 CTTAATGSCCCCGGCCACTGCCCCATTTGATATCAGCGCTGCAACTGATTTTGTGACACCCA 1159

QY 219 CCTCCACTTGAATTAGTCGGGGCAAGTCAATCGGTATATTAATTCATCACTAAAGAA 278  
DB 1158 CCG-----TTTAGAGGGTAGAAGTCCATCCGAATGTTGAACCCGTCACCAAGAG 1108

QY 279 ATGTCCAGAAATCTAAGTTGTTGAACTGGTCCAAAGCGTACTCGGCTAGGGTCTTTGGT 338  
DB 1107 ATGTCTGAGAAATCCTGTTGCCAAATTTGTTCAACGGGAATTCGCAAGTGTGTGGGA 1048

QY 339 GGTTTGCCCCACCGGTGCACTGCAGGACACCAACAATCACCAGTCAATGCACGAACCT 398  
DB 1047 GGGACCCCGCAGCTTGGCAATTCAGGCGCGCCGTCAGTCTCCCGTTTGGCAGCGGCG 988

QY 399 CTACGACGACACCGAAGTTACATCCAGTAGCAGCCCATATATCGTGCATGTAGTGCCT 458  
DB 987 CGGCGGTGTCATCAAAAGTTGCACCGGTGCGGCCCATATATACGGGCGCATGGCAGTGCCT 928

QY 459 CTAGGCGCATCAATGACCCCATTTGGCTCGATCGAGAGCTCGGGCACCGCTATCGG 518  
DB 927 GGTTTCAACAGAGTTCCACGTTTGGCCAGTTCAGAGCGCGGCTCCACCC--CGGAC 870

QY 519 TCATGTCGCGCCCAACAGATGTATGCACAGTTGTTGGCGGT 558  
DB 869 TCGCGCGGCCACACCGTGTAGGGCAATTTGTTGACGAT 830

## RESULT 15

US-10-424-599-7736/c  
; Sequence 7736, Application US/10424599  
; Publication No. US20040031072A1  
; GENERAL INFORMATION:  
; APPLICANT: La Rosa Thomas J  
; APPLICANT: Kovalic David K  
; APPLICANT: Zhou Yihua  
; APPLICANT: Cao Yongwei  
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With  
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO 7736  
; LENGTH: 1173  
; TYPE: DNA  
; ORGANISM: Glycine max  
; FEATURE:  
; NAME/KEY: unsure  
; LOCATION: (1)...(1173)  
; OTHER INFORMATION: unsure at all n locations  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_106998C.1  
US-10-424-599-7736

Query Match 8.6%; Score 137.2; DB 18; Length 1173;  
Best Local Similarity 58.7%; Pred. No. 7.7e-20;  
Matches 303; Conservative 0; Mismatches 193; Indels 20; Gaps 3;

QY 49 ATCTTTGTTTGAAGAAATTCGAAAGAACCTAGGACCACA-----TGGACCTTGGGTGC 102

DB 664 ACCTCTCTTGAAGAACTTGGAAATAACAGTGGGACCGCAACCCGACGACCGGTGCTAC 605  
QY 103 AACAAATATTGTTGCTCCCAATGTGTGTAAGGATTTGTACATCTCTCCGGGTACTTTAA 162  
DB 604 AACAGTACTAGTGTGTAATGAAACCCGTGACCGGTTGTTGACGCCCGCGGAAACCTGAA 545  
QY 163 GCTGACTAGGACATTCACCAATTTATATTTGCGGTGCAATGAAATGTGTGGCATTTCCCTC 222  
DB 544 GCTGAGTGGACACTCTCCCATGATGTGCGGGCGCAATTCACGGAGCTGCAGTTG---- 489  
QY 223 CACTTGGATTAGTCGGGGCGAAAGTCAATCGGTATATTAAATCCATCAACTAAAGAAATGT 282  
DB 488 -----TAGGTCCGGCTCACCTGCAAGGGAATGTTGAAACCGTTCGACGAGGAGATGT 437  
QY 283 CCAGAAATCTAAGTTGTTGAACTGGTCCAAAGCGTACTCGGCTAGGGTGTGTTGGTGT 342  
DB 436 CGTAGAAGTTCGAGGTTGTTGTACTGTTCAACCGGAATTCACCAACGTGTTGAGAGGTG 377  
QY 343 TGCCCCACCGGTGCACTGCAGGACACCAACAATCACCAGTCAATGCACGAACCTCTAC 402  
DB 376 TACCTGTTTGTGCACTCAAGAACACCGTTCGAGTCCCGGTGAGGACACTTCCCGGTC 317  
QY 403 CAGCACCAACCGAAGTTACATCCAGTACGACCCCATATATACGTGCCATCGTAGTGCCCTAG 462  
DB 316 CTGCGTTGTGAAAGTGCAGTTTGTTCGACCCCAAGATGCGTCTCTGTGTGTCGCGTTCG 257  
QY 463 GCGCATCAATGACCCACATTTGGCTCGATCGAGACGTCGGGACCCGCTATCGGGTGA 522  
DB 256 TCACGCTGATGTTCCAGATTCGCCAGGTTAAGCCTTGAGCCCGCCCGGCGCACGGCG- 198  
QY 523 TGCGGCCCAACGATGTATGCAGAGTTGTTGGCGGT 558  
DB 197 -GCGGCCACACCGTGTAGTGCATTTGTTGTAT 163

Search completed: June 18, 2005, 02:50:37

Job time : 1005.49 secs

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GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 17, 2005, 17:23:59 ; Search time 260.994 Seconds  
(without alignments)  
10018.495 Million cell updates/sec

Title: US-10-051-307-2

Perfect score: 1598

Sequence: 1 gtaatacagctactatagg.....tggtgaagttggtgtcttc 1598

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA.\*

- 1: /cgn2\_6/ptodata/1/ina/5A\_COMB.seq.\*
- 2: /cgn2\_6/ptodata/1/ina/5B\_COMB.seq.\*
- 3: /cgn2\_6/ptodata/1/ina/6A\_COMB.seq.\*
- 4: /cgn2\_6/ptodata/1/ina/6B\_COMB.seq.\*
- 5: /cgn2\_6/ptodata/1/ina/PCTUS\_COMB.seq.\*
- 6: /cgn2\_6/ptodata/1/ina/backfiles.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	468.8	29.3	3033	1	US-08-482-037A-1
C 2	419.8	26.3	883	1	US-07-828-798C-4
C 3	419.8	26.3	883	3	US-08-315-868A-4
C 4	419.8	26.3	883	3	US-08-495-819B-4
C 5	419.8	26.3	884	1	US-07-828-798C-5
C 6	419.8	26.3	884	2	US-08-315-868A-5
C 7	419.8	26.3	884	3	US-08-495-819B-5
C 8	168.8	10.6	875	4	US-08-589-733C-4
C 9	144.8	9.1	900	1	US-08-181-271A-4
C 10	144.8	9.1	900	1	US-08-449-315-4
C 11	144.8	9.1	900	1	US-08-444-803-4
C 12	144.8	9.1	900	1	US-08-449-043-4
C 13	144.8	9.1	900	1	US-08-456-265A-4
C 14	144.8	9.1	900	1	US-08-455-416-4
C 15	144.8	9.1	900	1	US-08-455-244-4
C 16	144.8	9.1	900	1	US-08-454-876-4
C 17	144.8	9.1	900	2	US-08-457-364-4
C 18	144.8	9.1	900	2	US-08-456-262-4
C 19	144.8	9.1	900	2	US-08-456-240-4
C 20	144.8	9.1	900	2	US-08-455-736-4
C 21	144.8	9.1	900	2	US-08-971-217-4
C 22	144.8	9.1	900	3	US-09-350-600-4
C 23	144.8	9.1	900	4	US-09-906-234-4
C 24	138.6	8.7	910	4	US-09-685-292-1
C 25	109	6.8	894	1	US-08-178-708-7
C 26	109	6.8	894	1	US-08-457-552-7
C 27	109	6.8	894	1	US-08-456-430-7

Query Match 29.3%; Score 468.8; DB 1; Length 3033;

#### ALIGNMENTS

##### RESULT 1

US-08-482-037A-1/c

Sequence 1, Application US/08482037A

Patent No. 5801028

GENERAL INFORMATION:

APPLICANT: Ray Bressan and Paul M. Hasegawa

TITLE OF INVENTION: Osmotin Gene Promoter and Use Thereof

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS:

ADDRESSEE: Thomas Q. Henry

STREET: Bank One Tower, Suite 3700, 111 Monument Circle

CITY: Indianapolis

STATE: Indiana

COUNTRY: USA

ZIP: 46204-5137

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage

COMPUTER: COMPAQ

OPERATING SYSTEM: MSDOS

SOFTWARE: ASCII

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/482,037A

FILING DATE: June 7, 1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/476,243

FILING DATE: June 7, 1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/180,428

FILING DATE: January 12, 1994

APPLICATION NUMBER: 08/065,147

FILING DATE: May 20, 1993

ATTORNEY/AGENT INFORMATION:

NAME: Thomas Q. Henry

REGISTRATION NUMBER: 28,309

REFERENCE/DOCKET NUMBER: 7024-8/PUR16CIPDIVII

TELECOMMUNICATION INFORMATION:

TELEPHONE: (317) 634-3456

TELEFAX: (317) 637-7561

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 3033 bases

TYPE: Nucleotide/Amino Acid

STRANDEDNESS: Double

TOPOLOGY: Linear

MOLECULE TYPE: Genomic DNA

US-08-482-037A-1

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Best Local Similarity 76.8%; Pred. No. 1.4e-109;
Matches 679; Conservative 0; Mismatches 162; Indels 43; Gaps 7;

QY 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGAGTAGGACCATGACCTTGGGTGCAAC 105
    |||||
Db 2622 GGCATCTTTGTTGAAAAAATTTGAAAAAGAGTAGGACCATGACCTTGGGTGCAAC 2563

QY 106 AATATTGTTGCTCTCAATGTTGTTACAAAGATTTGTTACATCTCCGGGTACTTTAAGCT 165
    |||||
Db 2562 AATATTGTTGCTCTCGAATGTTGTTACAAAGATTTGTTACATCTCCGGGTACTTTAAGCT 2503

QY 166 GACTAGGACATTCACCATTTATTTGCGGTGCTGATGTTGTTGCGGATTTCCCTCCAC 225
    |||||
Db 2502 CGCGGGGACATTCGCGGTGCTGATGTTGTTGCGGATTTCCCTCCAC 2443

QY 226 TTGGATTAGTCGGGGGAAAGTACGCTGATTTAAATCCATCACTAAAGAAATGTCCC 285
    |||||
Db 2442 TAGGGTTAGTCGGGGGAAAGTACGCTGATTTAAATCCATCACTAAAGAAATGTCCC 2383

QY 286 AGAAATCTAAGTTGTTGAACTGTTGTTCAAGGCTACTCGGCTAGGTTGTTGTTGCTTGC 345
    |||||
Db 2382 AGAAATCTAAGTTGTTGAACTGTTGTTCAAGGCTACTCGGCTAGGTTGTTGTTGCTTGC 2323

QY 346 CCCACCCGCTGACTGAGGACACCAACCAATCACCAGTATGACCAAGCTCTACCAG 405
    |||||
Db 2322 CCCACCCGCTGACTGAGGACACCAACCAATCACCAGTATGACCAAGCTCTACCAG 2263

QY 406 CACCAACGAAAGTTACATCGATGACACCCCATATACGTGCTGATGCTGCTTGGCGG 465
    |||||
Db 2262 CAGCATGAGTTACAAATGTTAGCGGCCCATACAGTGGCATTTAGTACCTCGTGGCG 2203

QY 466 CATCAATGACCCACATTTGGCTCTGATCGAGAGCTGCGGCGACCGCTATCGG-GTCGATG 524
    |||||
Db 2202 CATTCATCACCACAGTTTGGCTCTGATCGAGAGCTGCGGCGACCGCTATCGG-GTCGAGC 2143

QY 525 CGCGCCAAACAGTATGACGAGTGTGTTGGCGGTACCTCGATGACGAGCATTAAGTGA 584
    |||||
Db 2142 CGCGCCAAACAGTATGACGAGTGTGTTGGCGGTACCTCGATGACGAGCATTAAGTGA 2085

QY 585 AGTCAAAAAGCAGAGGAGAAACCAAGAGATCTCAAGTACGCTGTTGTTGTA 644
    |||||
Db 2084 AGTCAAAAAGCAGAGGAGAAACCAAGAGATCTCAAGTACGCTGTTGTTGTA 2025

QY 645 AATTTATATGTTGGAACAATATTTTGTGTAAT- - - - -TTATATATA 685
    |||||
Db 2024 CATTTTATTTTAAAGTTGGGTGTTGTTGATATAGTACAAATTTGTTAGTGGTTATATA 1965

QY 686 GGGATATGCGGCTTTTGGCTACGATATTAATCGTATTAATAACAATATCATCTT 745
    |||||
Db 1964 GGGGAATGCGGCTTTTGGCTACGATATTAATCGTATTAATAACAATATTAACAT 1910

QY 746 TGACTAATTTAAACGAAATATTTATACATATGATTTGTTAAACGTTGAGGTGG-AAAAA 804
    |||||
Db 1909 TGACTA- - -ATPAAACGATATATCTCAAGGATGCTTTGGCAAGATGAGGCGGCTTA 1853

QY 805 TGATTAAGAGCGCTTAATAATAATTTATTAATGATTAATGATTAATGATTAATGATTA 864
    |||||
Db 1852 AACATAAGAGCGCTTAATAATAATTTATTAATGATTAATGATTAATGATTAATGATTA 1805

QY 865 CTTTATTTGGTGAATCTTTGACATATTAATCTCTGTAACGTGAC 908
    |||||
Db 1804 ATTTATTTGGTGAATCTTTGACATATTAATCTCTGTAACGTGAC 1761

```

RESULT 2

US-07-828-798C-4/c

; Sequence 4, Application US/07828798C

; Patent No. 5389609

; GENERAL INFORMATION:

; APPLICANT: Woloshuk, Charles P.

; APPLICANT: Melchers, Leo S.

; APPLICANT: Cornelissen, Bernardus J. C.

; APPLICANT: Meulenhoff, Elisabeth J. S.

```

; APPLICANT: Sela-Buurlage, Marianne B.
; APPLICANT: Van Den Elzen, Petrus J. M.
; TITLE OF INVENTION: Antifungal Preparations, Process for
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with
; TITLE OF INVENTION: Decreased Susceptibility to Fungi
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESS: Ladas & Parry
; STREET: 26 West 61st Street
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10023
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage
; COMPUTER: IBM PC/XT/AT or compatibles
; OPERATING SYSTEM: DOS
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/828,798C
; FILING DATE: 06-APR-1992
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/NL91/00089
; FILING DATE: 31-05-91
; ATTORNEY/AGENT INFORMATION:
; NAME: Mass, Clifford J.
; REGISTRATION NUMBER: 30086
; REFERENCE/DOCKET NUMBER: U-8622-6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 708-1800
; TELEFAX: (212) 246-8959
; TELEX: 233288
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 883
; TYPE: Nucleotide
; STRANDEDNESS: Double
; TOPOLOGY: Linear
; MOLECULE TYPE: cdna
; ORIGINAL SOURCE:
; ORGANISM: Nicotiana tabacum
; US-07-828-798C-4

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Query Match 26.3%; Score 419.8; DB 1; Length 883;

Best Local Similarity 84.0%; Pred. No. 2.7e-97;

Matches 498; Conservative 0; Mismatches 92; Indels 3; Gaps 2;

```

QY 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGAGTAGGACCATGACCTTGGGTGCAAC 105
    |||||
Db 605 GGCATCTTTGTTGAAAAAATTTGAAAAAGAGTAGGACCATGACCTTGGGTGCAAC 546

QY 106 AATATTGTTGCTCTCAATGTTGTTACAAAGATTTGTTACATCTCCGGGTACTTTAAGCT 165
    |||||
Db 545 AATATTGTTGCTCTCGAATGTTGTTACAAAGATTTGTTACATCTCCGGGTACTTTAAGCT 486

QY 166 GACTAGGACATTCACCATTTATTTGCGGTGCTGATGTTGTTGCGGATTTCCCTCCAC 225
    |||||
Db 485 CGCGGGGACATTCGCGGTGCTGATGTTGTTGCGGATTTCCCTCCAC 426

QY 226 TTGGATTAGTCGGGGGAAAGTACGCTGATTTAAATCCATCACTAAAGAAATGTCCC 285
    |||||
Db 425 TAGGGTTAGTCGGGGGAAAGTACGCTGATTTAAATCCATCACTAAAGAAATGTCCC 366

QY 286 AGAAATCTAAGTTGTTGAACTGGTCCAAAGGCGTACTCGGCTAGGTTGTTGTTGTTGCTTC 345
    |||||
Db 365 AGAAATCTAAGTTGTTGAACTGGTCCAAAGGCGTACTCGGCTAGGTTGTTGTTGCTTC 306

QY 346 CCCACCCGCTGACTGAGGACACCAACCAATCACCAGTATGACCAAGCTCTACCAG 405
    |||||
Db 305 CCCACCCGCTGACTGAGGACACCAACCAATCACCAGTATGACCAAGCTCTACCAG 246

QY 406 CACCAACGAAAGTTACATCAGTACGACCCCATATACGTGCTGACCTAGTGGCGCTTAGCGG 465
    |||||

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Db 245 CAGATTGAACTTACNATTAGTACGGCCCATACAGTGCCTTTAGTACCTCGTGGCG 186  
Qy 466 CATCAATGACCCATTTGGCTCGATCGAGACGTGCGGCAACCCGCTATCGG-GTCCGATG 524  
Db 185 CATTGATCACCAAGTTTGGCTCGATCGAGACGCGGCCACCCGCTATGGGTGTCGACG 126  
Qy 525 CCGCCCAACCATGATGACGACGTTTGGCGGTACCTCGATAGTGACAGCATAGTGAA 584  
Db 125 CCGCCCAACCGTGTACGACAGTTGTT--TCGGACCTCGATAGTGGCAGCATAGTATA 68  
Qy 585 AGTCACAAAACCCAGAGGGAGAAACCAAAAGAAAGATCTCAAGTAGCCCATGT 637  
Db 67 AGTCACCAAGCAAGGAGGAAGAAACAAAGAAAGATCTCAAGTTGCCCATGT 15

## RESULT 3

US-08-315-868A-4/c  
; Sequence 4, Application US/08315868A  
; Patent No. 5856151  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
; TITLE OF INVENTION: Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10023  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
; COMPUTER: IBM PC/XT/AT or compatibles  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/315,868A  
; FILING DATE: 09-SEP-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/828,798  
; FILING DATE: 06-APR-1992  
; APPLICATION NUMBER: PCT/NL91/00089  
; FILING DATE: 31-05-91  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mass, Clifford J.  
; REGISTRATION NUMBER: 30086  
; REFERENCE/DOCKET NUMBER: U-8622-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 708-1800  
; TELEFAX: (212) 246-8959  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 883  
; TYPE: Nucleotide  
; STRANDEDNESS: Double  
; TOPOLOGY: Linear  
; MOLECULE TYPE: cDNA  
; ORIGINAL SOURCE:  
; ORGANISM: Nicotiana tabacum

US-08-315-868A-4

Query Match 26.3%; Score 419.8; DB 2; Length 883;  
Best Local Similarity 84.0%; Pred. No. 2.7e-97;

Matches 498; Conservative 0; Mismatches 92; Indels 3; Gaps 2;  
Qy 46 GGTATCTTTTGTGAAAAAATTTGAAAAAGAACGATGACACATGACCTTTGGTGGCAAC 105  
Db 605 GGCATCTTTTGTGAAAAAATTTTGAAGAAAAATGTAGGACCAACAAGGTCTTTGTGTGCAAC 546  
Qy 106 AATATTTGTTCTCTCCCAAAATGTGTACAAGATTTGTACATCTCCCGGTACTTTAAGCT 165  
Db 545 AATATTTGTTCTCTCCCAAAATGTGTACAAGATTTGTACATCTCCCGGTAAACCCCTAAGTT 486  
Qy 166 GACTAGACATTTACCATTTTATTTTCCGCTGCAATTTGAATTTGTGGCATTTCTCTCCAC 225  
Db 485 CGCGGGACATTTCCCGCTTTTATTTAGCCGTACATGAATTTGCATGCGATTTCTCTCCAC 426  
Qy 226 TTGGATTAGTCGGGGCGAAAGTCAATCGGTATTTAAATTCATCAATCAAAAGAAATGCCC 285  
Db 425 TAGGTTAGTCGGGGCGAAAGTCAATCGGAATTTGAATTCATCAATCAAAAGAAATGCCC 366  
Qy 286 AGAAATCTAAGTTTGTGAACTGTGTCGAAGGGTACTCGGCTAGGCTTTTGGTGGTTGC 345  
Db 365 AGAAATCTAAGTTTGTGAACTGTGTCGAAGGGTACTCGGCTAGGCTTTTGGTGGTTGC 306  
Qy 346 CCACCCGGTGCATCTGAGGACACCCACCAATCCACAGTCAATCCAGCACTCTACCAG 405  
Db 305 CCACCCGGTGCATCTGAGGACACCCACCAATCCACAGTCAATCCAGTCAATCCAGTCAATCCAG 246  
Qy 406 CACACCGAATTTACATCCAGTACGACCCCATATACGTCGATCGTGTAGTCCCTTAGCGG 465  
Db 245 CAGATTGAAATTTACATTTAGTACGGGCCCATACACGTCGATTTTGTAGTACCTCGTGGG 186  
Qy 466 CATCAATGACCCATTTGGCTCGATCGAGACGTGCGGACCGCCCTATCGG-GTCCGATG 524  
Db 185 CATTGATCACCAAGTTTGGCTCGATCGAGACGCGGCCACCGCTATGGGTGTCGACG 126  
Qy 525 CCGCCCAACGATGTATGGACAGTTTGGCGGTACCTCGATAGTGTACGACATAGTGAA 584  
Db 125 CCGCCCAACGTTGTACGGACAGTTGTT--TCGGACCTCGATAGTGGCAGCATAGTATA 68  
Qy 585 AGTCACAAAACCCAGAGGGAGAAACCAAAAGAAAGATCTCAAGTAGCCCATGT 637  
Db 67 AGTCACCAAGCAAGGAGGAAGAAACAAAGAAAGATCTCAAGTTGCCCATGT 15

## RESULT 4

US-08-495-819B-4/c  
; Sequence 4, Application US/08495819B  
; Patent No. 6087161  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants  
; TITLE OF INVENTION: with Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10023  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
; COMPUTER: IBM PC/XT/AT or compatibles  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/495,819B  
; FILING DATE: 09-SEP-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/828,798  
; FILING DATE: 06-APR-1992  
; APPLICATION NUMBER: PCT/NL91/00089  
; FILING DATE: 31-05-91  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mass, Clifford J.  
; REGISTRATION NUMBER: 30086  
; REFERENCE/DOCKET NUMBER: U-8622-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 708-1800  
; TELEFAX: (212) 246-8959  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 883  
; TYPE: Nucleotide  
; STRANDEDNESS: Double  
; TOPOLOGY: Linear  
; MOLECULE TYPE: cDNA  
; ORIGINAL SOURCE:  
; ORGANISM: Nicotiana tabacum

[illegible]

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RESULT 5
US-07-828-798C-5/c
; Sequence 5, Application US/07828798C
; Patent No. 5389609
; GENERAL INFORMATION:
; APPLICANT: Woloshuk, Charles P.
; APPLICANT: Melchers, Leo S.
; APPLICANT: Cornelissen, Bernardus J. C.
; APPLICANT: Meulenhoff, Elisabeth J. S.
; APPLICANT: Sela-Buurlage, Marianne B.
; APPLICANT: Van Den Elzen, Petrus J. M.
; TITLE OF INVENTION: Antifungal Preparations, Process for
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with
; TITLE OF INVENTION: Decreased Susceptibility to Fungi
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ladas & Parry
; STREET: 26 West 61st Street
; CITY: New York
; STATE: New York
; COUNTRY: USA
; ZIP: 10023
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage
; COMPUTER: IBM PC/XT/AT or compatibles
; OPERATING SYSTEM: DOS
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/828,798C
; FILING DATE: 06-APR-1992
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/NL91/00089
; FILING DATE: 31-05-91
; ATTORNEY/AGENT INFORMATION:
; NAME: Mass, Clifford J.
; REGISTRATION NUMBER: 30086
; REFERENCE/DOCKET NUMBER: U-8622-6
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 708-1800
; TELEFAX: (212) 246-8959
; TELEX: 233288
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 884
; TYPE: Nucleotide
; STRANDEDNESS: Double
; TOPOLOGY: Linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Nicotiana tabacum
US-07-828-798C-5

Query Match 26.3%; Score 419.8; DB 1; Length 884;
Best Local Similarity 84.0%; Pred. No. 2.7e-97;
Matches 498; Conservative 0; Mismatches 92; Indels 3; Gaps 2;

Qy 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGACGTAGGACCACATGGACCTTGGGTGCAAC 105
Db 605 GGCATCTTTGTTGAAAAAATTTTGAAAAAATTTAGAGAACCAAGGTCTTGTGTGCAAC 546
Qy 106 AATATTGTTGCTCCAAATGTGGTCAAGGATTGTATCATCTCCGGGTACTTTAAGCT 165
Db 545 AATATTGTTGCTCCGAATGTAGTACAAGGGTTATTATCATCTCCGGGAACCTAAGTT 486
Qy 166 GACTAGGACATTCCACATTTATATTGTCGCTGATTGAATTGTGTGGCATTTTCCCTCCAC 225
Db 485 CGCGGGGACATTGCGCGTTTATTATTAGTCGTACATGAATTGCATGCGCATTTCCCTCCAC 426
Qy 226 TTGGATTAGTCGGGGCGCAAGTCATCGGTATATTAAATCCATCAACTAAAGAAATGTCCC 285
Db 425 TAGGGTTAGTCGGGGCGCAAGTCATCGGAATGTTGAATCCATCAACTAAAGAAATGTCCC 366

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Qy 286 AGAAATCTAAGTTGTTGAACTGGTCCAAAGCGTACTCGGCTAGGCTGTTGGTGGTTTGC 345  
Db 365 AGAAATCTAAACCACTGAATTGGTCCAAAGCGTATTAGCAAGGTTGTTGGTGGTTTAC 306  
Qy 346 CCGACCGGTCAGTCCAGGACACACACACATCACCAGTATCCAGCAACCTTACAG 405  
Db 305 CCGACCGGTCAGTCCAGGACACACACACATCACCAGTATCCAGCAACCTTACAG 246  
Qy 406 CACCAACCAAGTTATACATCCAGTACGACCCCATATACGTCATCGTAGTGCCTTAGGCG 465  
Db 245 CAGATTGAAGTTACATTTAGTACGGCCCATACACAGTGCCTTTTATAGTACCTCGTGGCG 186  
Qy 466 CATCAATGACCAATTTGGCTCGATCGAGACGTCGCGGACCCGCTTATCGG-GTCGATG 524  
Db 185 CATGATCACCAAGTTGGCTCGATCGAGACGTCGCGGACCCGCTTATAGTGGTGTGCAAG 126  
Qy 525 CCGCCCAACAGTATGAGCAGTTGTTGGCGGTACCTCGATAGTGCCTTAGGCG 584  
Db 125 CCGCCCAACAGTATGAGCAGTTGTTGGCGGTACCTCGATAGTGCCTTAGGCG 68  
Qy 585 AGTCACAAAGCCAGAGGAGAAACCAAAAGAGATCTCAAGTAGGCCATGT 637  
Db 67 AGTCACCAAGGAGGAGAGAAACCAAAAGAGATCTCAAGTAGGCCATGT 15

## RESULT 6

US-08-315-868A-5/c  
; Sequence 5, Application US/08315868A  
; Patent No. 5856151  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
; TITLE OF INVENTION: Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10023  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
; COMPUTER: IBM PC/XT/AT or compatibles  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/315,868A  
; FILING DATE: 09-SEP-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/828,798  
; FILING DATE: 06-APR-1992  
; APPLICATION NUMBER: PCT/NL91/00089  
; FILING DATE: 31-05-91  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mass, Clifford J.  
; REGISTRATION NUMBER: 30086  
; REFERENCE/DOCKET NUMBER: U-8622-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 708-1800  
; TELEFAX: (212) 246-8959  
; TELEX: 233288  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 884

; TYPE: Nucleotide  
; STRANDEDNESS: Double  
; TOPOLOGY: Linear  
; MOLECULE TYPE: cDNA  
; ORIGINAL SOURCE:  
; ORGANISM: Nicotiana tabacum  
US-08-315-868A-5

Query Match 26.3%; Score 419.8; DB 2; Length 884;  
Best Local Similarity 84.0%; Pred. No. 2.7e-97;  
Matches 498; Conservative 0; Mismatches 92; Indels 3; Gaps 2;

Qy 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGACGTAGGACACCATGGACCTTGGTGGCAAC 105  
Db 605 GGCATCTTTGTTGAAAAAATTTGAAAAAGACGTAGGACACCATGGACCTTGGTGGCAAC 546  
Qy 106 AATATTGCTGCTCCCAAAATGTTGTAAGATTTTACATCCTCCGGGTACTTTTAAGCT 165  
Db 545 AATATTGCTGCTCCCAAAATGTTGTAAGATTTTACATCCTCCGGGTACTTTTAAGCT 486  
Qy 166 GACTAGGACATTCACCAATTTATTTTCCGCTGCAATTTGAATTTGTGTGGCATTTCCCTCCAC 225  
Db 485 CGCGGGACATTCGCGCTTTATATTAGCGGTACAAATGAATTTGCATTTCCCTCCAC 426  
Qy 226 TTGATTTAGTCCGGGCGAAAAAGTCTATCGGTATATTTAAATTCATCACTAAAGAAATGTCCC 285  
Db 425 TAGGGTTAGTCCGGGCGAAAAAGTCTATCGGAATTTTGAATTCATCACTAAAGAAATGTCCC 366  
Qy 286 AGAATCTAAGTTGTTGAACTGGTCCAAAGCGTACTCGGCTAGGCTGTTGGTGGTTTGC 345  
Db 365 AGAATCTAAGTTGTTGAACTGGTCCAAAGCGTACTCGGCTAGGCTGTTGGTGGTTTAC 306  
Qy 346 CCACCCCGGTGCACTGACGACACACACCAATCACCAGTCAATCAGCAACCTCTTACCAG 405  
Db 305 CCACCCCGGTGCACTGACGACACACCAATCACCAGTCAATCAGCAACCTCTTACCAG 246  
Qy 406 CACCAACCAAGTTATACATCCAGTACGACCCCATATACGTCATCGTAGTGCCTTAGGCG 465  
Db 245 CAGATTGAAGTTACATTTAGTACGGCCCATACACAGTGCCTTTTATAGTACCTCGTGGCG 186  
Qy 466 CATCAATGACCAATTTGGCTCGATCGAGACGTCGCGGACCCGCTTATCGG-GTCCGATG 524  
Db 185 CATGATCACCAAGTTGGCTCGATCGAGACGTCGCGGACCCGCTTATAGTGGTGTGCAAG 126  
Qy 525 CCGCCCAACAGTATGAGCAGTTGTTGGCGGTACCTCGATAGTGCCTTAGGCG 584  
Db 125 CCGCCCAACAGTATGAGCAGTTGTTGGCGGTACCTCGATAGTGCCTTAGGCG 68  
Qy 585 AGTCACAAAGCCAGAGGAGAAACCAAAAGAGATCTCAAGTAGGCCATGT 637  
Db 67 AGTCACCAAGGAGGAGAGAAACCAAAAGAGATCTCAAGTAGGCCATGT 15

## RESULT 7

US-08-495-819B-5/c  
; Sequence 5, Application US/08495819B  
; Patent No. 6087161  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants  
; TITLE OF INVENTION: with Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York



QY 529 CCAACGATGTATGACAGTGT 552  
Db 105 CCAACGATGTATGACAGTGT 82

## RESULT 9

US-08-181-271A-4/c

Sequence 4, Application US/08181271A

Patent No. 5614395

GENERAL INFORMATION:

APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.

TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC

TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF

NUMBER OF SEQUENCES: 106

CORRESPONDENCE ADDRESS:

ADDRESSEE: CIBA-GEIGY Corporation

STREET: 7 Skyline Drive

CITY: Hawthorne

STATE: New York

COUNTRY: USA

ZIP: 10532

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/181.271A

FILING DATE: 13-JAN-94

CLASSIFICATION: 435

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 08/093,301

FILING DATE: 16-JUL-1993

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/937,197

FILING DATE: 6-NOV-1992

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/678,378

FILING DATE: 1-APR-1991

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/305,566

FILING DATE: 6-FEB-1989

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/165,667

FILING DATE: 8-MAR-1988

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 08/042,847

FILING DATE: 6-APR-1993

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/632,441

FILING DATE: 21-DEC-1990

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/425,504

FILING DATE: 20-OCT-1989

PRIORITY APPLICATION DATA:

APPLICATION NUMBER: US 07/848,506

FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919) 541-8614  
TELEFAX: (919) 541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cdna  
US-08-181-271A-4

## Query Match

Best Local Similarity 9.1%; Score 144.8; DB 1; Length 900;

Matches 335; Conservative 0; Mismatches 197; Indels 22; Gaps 5;

Qy 46 GGTATCTTTGTTGAAAAAATGGAAAAAGACGAGGACCAAT-----GGACCTTGGG 99  
Db 607 GGCATCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548  
Qy 100 TGCACAAATATTGTTCTCCCAATGTGTACAAAGATGTTTACATCTCTCGGGTACTT 159  
Db 547 TACAACAAATATTCAATGGTTTATACAGTACATGGGTGTTTACATCCACTTGTGTGTT 488  
Qy 160 TAAGCTGACTAGGACATTCACCATTTATATTGCGGTGCATTTGAATTTGTGGCATTTCC 219  
Db 487 TCACTGTGTGGCATTGTTGTTAATAGTGTCTGTGCATCTGAGATTACGACAT----- 432  
Qy 220 CTCCACTTGGATTAGTCGGGGCGAAAGTCATCGGTATATATAATCCATCAACTAAAGAAA 279  
Db 431 -----CTCCATTGGTGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGAGA 377  
Qy 280 TGTCCAGAAATCTAAGTTGTTGAACTGGTTCAGAGCGGTACTCGGCTAGGTGTTTGGTG 339  
Db 376 TGTGACAAAAGTC---CTGATTGGGTTGATTAAAGTGCAAAATTCAGCTAAAGTGTAGGTG 320  
Qy 340 GTTTGCCCCACCCGGTGCACCTGCAGGACACACCAACATACACAGTCAATGACCAACCTC 399  
Db 319 CTTTTCATAGCCTTGACATCTTAACATCCCGTTACAGTCTCCAGTCTCAACATTAACCTC 260  
Qy 400 TACCAGCACCAACGAAAGTTATCATCCAGTACAGACCCCATATATACGTGCCATCGTAGTCCC 459  
Db 259 GGCCACTGCCATCGAAGTTGCAATTTGGTTCAGCCCCAAATGCGAGCCCTGGAGCTGTTCTG 200  
Qy 460 TAGCGGATCAATGACCCACATTTGGCTCGATCGAGACGTGCGGACCGGCTATCGGGT 519  
Db 199 GGTTCATTAAATGCTCCAAGATTGGCTCTGAGTCAGCGCGCTCTGCTCCACC--TGGAGA 142  
Qy 520 CGATCGCGCCCAACAGATGTATGGACAGTTGTTGGCGGTACTCTCGATGATGACAGCATAA 579  
Db 141 GGCCGCGGCCCAAGACTGTGTAGGTGTCATTTGTTGAC--AATGTCAAAGTGGCAGCATGA 84  
Qy 580 GTGAAAGTCAAAA 593



Db 83 GTACAGCTACAAA 70

RESULT 11

US-08-444-803-4/c

Sequence 4, Application US/08444803

Patent No. 5654414

GENERAL INFORMATION:

APPLICANT: Ryals, John A.

APPLICANT: Alexander, Danny C.

APPLICANT: Beck, James J.

APPLICANT: Duesing, John H.

APPLICANT: Friedrich, Leslie B.

APPLICANT: Goodman, Robert M.

APPLICANT: Harms, Christian

APPLICANT: Meins, Jr., Frederick

APPLICANT: Montoya, Alice

APPLICANT: Moyer, Mary B.

APPLICANT: Neuhaus, Jean-Marc

APPLICANT: Payne, George B.

APPLICANT: Sperison, Christoph

APPLICANT: Stinson, Jeffrey R.

APPLICANT: Uknes, Scott J.

APPLICANT: Ward, Eric R.

APPLICANT: Williams, Shericca C.

TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC

TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF

NUMBER OF SEQUENCES: 106

CORRESPONDENCE ADDRESS:

ADDRESSEE: CIBA-GEIGY Corporation

STREET: 7 Skyline Drive

CITY: Hawthorne

STATE: New York

COUNTRY: USA

ZIP: 10532

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/444,803

FILING DATE: 19-MAY-1995

CLASSIFICATION: 536

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/181,271

FILING DATE: 13-JAN-94

APPLICATION NUMBER: US 08/093,301

FILING DATE: 16-JUL-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/937,197

FILING DATE: 6-NOV-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/678,378

FILING DATE: 1-APR-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/305,566

FILING DATE: 6-FEB-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/165,667

FILING DATE: 8-MAR-1988

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/042,847

FILING DATE: 6-APR-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/632,441

FILING DATE: 21-DEC-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/425,504

FILING DATE: 20-OCT-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/848,506

FILING DATE: 6-MAR-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/768,122

FILING DATE: 27-SEP-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/580,431

FILING DATE: 7-SEP-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/368,672

FILING DATE: 20-JUN-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/329,018

FILING DATE: 24-MAR-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/045,957

FILING DATE: 12-APR-1993

ATTORNEY/AGENT INFORMATION:

NAME: Elmer, James Scott

REGISTRATION NUMBER: 36,129

REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727

TELECOMMUNICATION INFORMATION:

TELEPHONE: (919)541-8614

TELEFAX: (919)541-8689

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 900 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cdna

US-08-444-803-4

Query Match 9.1%; Score 144.8; DB 1; Length 900;

Best Local Similarity 60.5%; Pred. No. 4.8e-27;

Matches 335; Conservative 0; Mismatches 197; Indels 22; Gaps 5;

Qy 46 GGTATCTTTTGTGAAAAAATTGAAAAAGAACGTAGGACCCACAT-----GGACCTTGGG 99

Db 607 GGCACTCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCCAATGATCCAGGCCCATTTG 548

Qy 100 TGCACAAATATTGTTGCTCCCAATGTGTAGAGGATTTTACATCCTCGGGTACTT 159

Db 547 TACAACAATATTTCATTGGTTTTTATCACAGTACATGGGTTGTGTACATCCACCTTGTGTT 488

Qy 160 TAAGTCAGTAGGACATTCACCATTTATATTGTCGTCGATTTGAATTTGTGGCATTTCC 219

Db 487 TCAACTGTCTGGCATTTGTTAATAGGTGCTGTGCACTCGAGATTACGACAT----- 432

Qy 220 CTCACATTGGATTAGTCGGGGCGAAAGTCATCGGTATATTAAATCCATCAATAAGAAA 279

Db 431 -----CCTCCATTGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGA 377

Qy 280 TGTCACGAAATCTAAGTTGTTGAACTGGTTCAGAGGGGTACTCGGCTAGGTGTTGGTG 339

Db 376 TGTCACAAAATC---CTGATTGGGTTGATTAGTGCAAAATTCAGCTAAAGTGTAGGTG 320

Qy 340 GTTTGCCCCCCTGGTGCCTGAGGACACACACCAATCACCAGTCATGACCAACCTC 399

Db 319 CTTTTCCATAGCCTTGACATCTTAACATCCCGTTACAGTCTCCAGTCTCACAATTACCTC 260

Qy 400 TACCAGCACCCAGCAAGTTACATCCAGTAGACACCCCATATACGTGCCATCGTAGTGCCCC 459

Db 259 GGCCACTGCCATCGAAGTTGCAATTTGTTGACCCCAATTCGAGACCTGGAGCTTCTCTG 200

Qy 460 TAGGCGCATCAATGACCCACATTTGGCTCGATCGAGACGTCGGGACCGCCTATCGGGT 519

Db 199 GGTTACATTAAATGCTCCAAGATTGGCTGAGTCGAGCCGCTCGCTCCACC--TGGAGA 142

Qy 520 CGATGCCGCCCAACGATGTATGACAGATTGTTGGCGGTACTCGATGATGACAGCAATAA 579

Db 141 GGCGCGGCCCGAGACTGTGTAGGTGCAATTTGTTGAC--AATGTCAAAAGTGGCAGCATGA 84

Qy 580 GTGAAAGTCACAAA 593

83 GTAACAGCTACAAA 70

Db

RESULT 12

US-08-449-043-4/c  
Sequence 4, Application US/08449043

Patent No. 5689044

GENERAL INFORMATION:

APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.

TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC

TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF

NUMBER OF SEQUENCES: 106

CORRESPONDENCE ADDRESS:

ADDRESSEE: CIBA-GEIGY Corporation

STREET: 7 Skyline Drive

CITY: Hawthorne

STATE: New York

COUNTRY: USA

ZIP: 10532

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/449,043

FILING DATE: 24-MAY-1995

CLASSIFICATION: 800

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/181,271

FILING DATE: 13-JAN-94

APPLICATION NUMBER: US 08/093,301

FILING DATE: 16-JUL-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/937,197

FILING DATE: 6-NOV-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/678,378

FILING DATE: 1-APR-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/305,566

FILING DATE: 6-FEB-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/165,667

FILING DATE: 8-MAR-1988

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/042,847

FILING DATE: 6-APR-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/632,441

FILING DATE: 21-DEC-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/425,504

FILING DATE: 20-OCT-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/848,506

FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-449-043-4

Query Match 9.1%; Score 144.8; DB 1; Length 900;

Best Local Similarity 60.5%; Pred. No. 4.8e-27;

Matches 335; Conservative 0; Mismatches 197; Indels 22; Gaps 5;

QY	46	GGTATCTTTTGGAAAAATTTGAAAAAGACGTAGGACCAT-----GGACCTTGGG	99
Db	607	GGCATCTTTTCTTAAAAATCTCGACAATCAGTAGGCCACATGATCAGGCCCATTTG	548
QY	100	TGCAACAATATTGTGTCTCTCCAAATGTGTACAGAGATTGTATCATCTCCGGGTACTT	159
Db	547	TACAACAATATTTCATGGTGTATTTATCAGATACATGGGTGTGTTATCATCCACCTTGT	488
QY	160	TAAGCTGACTAGGACATTACATTTATTTTCCGCTGCATTTGATTTGTGGGATTTCC	219
Db	487	TCAACTGTGCTGGGCATTGTTCTGTTAATAGGTGTCTGTGCATCTGAGATTACGACAT	432
QY	220	CTCCACTTGGATTAGTCGGGGCGAAAGTCATCGGTATATTAATCCATCAACTAAAGAAA	279
Db	431	-----CCTCCATTGGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGA	377
QY	280	TGTCACGAAATCTAAAGTTGTTGAACCTGGTCCAAGGCGTACTCGGCTAGGGTGTGGTG	339
Db	376	TGTCGACAAAGTC---CTGATTGGTTCATTAAAGTGCAATTCAGCTAAAGTTAGGTG	320
QY	340	GTTTGCCCGCCCGGTGCACCTGAGGACACACACAATATCAGTATGACAGAACCTC	399
Db	319	CTTTTCCATAGCCTTGACACTTAACATCCCGTTACAGTCTCCAGTCTCACAAATTACCTC	260
QY	400	TACAGACACACCGAAGTTACATCCAGTACGACCCCATATAGTCCCATCGTAGTGCC	459
Db	259	GGCCACTGCCATCGAAGTTGCAATTTGGTTTGACCCCAATGGAGCCCTGGACTGTCTTG	200
QY	460	TAGCGCATCAATGACCCACATTTTGGCTCGATCGAGACGTCGGGCAACCGCTATCGGT	519
Db	199	GTTTCACATTAAATGCTCCAGATTGGCTGAGTCAGCGCGCTGCTCCACC--TGGAGA	142
QY	520	CGATGCCCGCCAAACGATGTATGAGCAGTTGTTGGCGGTACTCTGATAGTGACACATAA	579
Db	141	GGCGCGGCCCGCAGACTGTGTAGTGCATTTTGTGAC--AATGTCAAAAGTGGCAGCATGA	84
QY	580	GTGAAAGTCACAAA	593

Db 83 GTAAACAGCTACAAA 70

RESULT 13

US-08-456-265A-4/c

Sequence 4, Application US/08456265A

Patent No. 5767369

GENERAL INFORMATION:

APPLICANT: Alexander, Danny C.

APPLICANT: Ryals, John A.

APPLICANT: Goodman, Robert M.

APPLICANT: Stinson, Jeffrey R.

TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC

TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF

NUMBER OF SEQUENCES: 111

CORRESPONDENCE ADDRESS:

ADDRESSEE: CIBA-GEIGY Corporation

STREET: 520 White Plains Road, P.O. Box 2005

CITY: Tarrytown

STATE: New York

COUNTRY: USA

ZIP: 10591

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA: US/08/456, 265A

APPLICATION NUMBER: US/08/456, 265A

FILING DATE: 31-MAY-95

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/181,271

FILING DATE: 13-JAN-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/093,301

FILING DATE: 16-JUL-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/937,197

FILING DATE: 6-NOV-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/678,378

FILING DATE: 1-APR-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/305,566

FILING DATE: 6-FEB-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/165,667

FILING DATE: 8-MAR-1988

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/042,847

FILING DATE: 6-APR-1993

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/632,441

FILING DATE: 21-DEC-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/425,504

FILING DATE: 20-OCT-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/848,506

FILING DATE: 6-MAR-1992

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/768,122

FILING DATE: 27-SEP-1991

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/580,431

FILING DATE: 7-SEP-1990

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/368,672

FILING DATE: 20-JUN-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/329,018

FILING DATE: 24-MAR-1989

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/045,957

FILING DATE: 12-APR-1993

ATTORNEY/AGENT INFORMATION:

NAME: Meigs, J. Timothy

REGISTRATION NUMBER: 38,241

REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727/DIV10

TELECOMMUNICATION INFORMATION:

TELEPHONE: (919)541-8587

TELEFAX: (919)541-8689

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 900 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: CDNA

US-08-456-265A-4

Query Match 9.1%; Score 144.8; DB 1; Length 900;

Best Local Similarity 60.5%; Pred. No. 4.8e-27;

Matches 335; Conservative 0; Mismatches 197; Indels 22; Gaps 5;

Qy 46 GGTATCTTTTGTGAAAAAATTTGAAAAAGACGTAGGACCAAT-----GGACCTTGGG 99

Db 607 GGCATCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548

Qy 100 TGCNACAATATTGTTGCTCTCCAAATGTGTACAGGATTTGTACATCTCTCGGGTACTT 159

Db 547 TACAACAATATTCAATGTTTATATCAGTACATGATGGTGTGTACATCCACCTTGTGTT 488

Qy 160 TAAGTCAGTAGGACATTTACCATTTATTTGCGGTGCATTTGAATTTGTGGCATTTCC 219

Db 487 TCACTGTCTGGCATTTGTTGTTAATAGTGTCTGTGCACTCTGAGATTACGACAT---- 432

Qy 220 CTCACATTGGATTAGTCGGGCGGAAAGTCATCGGTATATTAAATCCATCACTAAAGAAA 279

Db 431 -----CTCCATTGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGA 377

Qy 280 TGTCCAGAAATCTAAGTTGTTGAACTGGTTCAGAGGGGTACTCGGTAGGTGTTGGTG 339

Db 376 TGTGACAAAGTC---CTGATTGGGTTGATTAAAGTGCAAAATTCAGCTAAAGTGTAGGTG 320

Qy 340 GTTGTCCCGCCCGGTGCTGTCAGGACACACACCAATCACCAGTCATGCAACCACTC 399

Db 319 CTTTTCCATAGCTTGACATCTTAACATCCCGTTACAGTCTCCAGTCTCACAATTACCTC 260

Qy 400 TACCAGCACCAACGAAAGTTACATCCAGTAGCACCCCATATACGTGCCATCGTAGTGCCTC 459

Db 259 GGCCACTGCCATCGAAGTTGCAATTTGTTGACCCCAAAATCGAGCCTGGACTGTTCCTG 200

Qy 460 TAGCGCATCAATGACCCACATTTGGCTCGATCGAGACGTCTGGGCAACCGCTTATCGGGT 519

Db 199 GGTTCAATTAATGCTCCAAAGATTGGCTGAGTCGAGCGGCTCGCTCCACC--TGGAGA 142

Qy 520 CGATGCCCGCCCAACGATGTATGCACAGTTGTTGGCGGTACCTCGATAGTCACAGCATAA 579

Db 141 GGCCGCGGCCAGACTGTGTAGTGGCATTTGTTGAC--AATGTCAAAAGTGGCAGCATGA 84

Qy 580 GTGAAAGTCACAA 593

Db 83 GTAAACAGCTACAAA 70

RESULT 14

US-08-455-416-4/c

Sequence 4, Application US/08455416

Patent No. 577200

GENERAL INFORMATION:

APPLICANT: Ryals, John A.

APPLICANT: Alexander, Danny C.

APPLICANT: Beck, James J.



APPLICANT: Duesing, John H.  
 APPLICANT: Friedrich, Leslie B.  
 APPLICANT: Goodman, Robert M.  
 APPLICANT: Harms, Christian  
 APPLICANT: Meins, Jr., Frederick  
 APPLICANT: Montoya, Alice  
 APPLICANT: Moyer, Mary B.  
 APPLICANT: Neuhaus, Jean-Marc  
 APPLICANT: Payne, George B.  
 APPLICANT: Sparison, Christoph  
 APPLICANT: Stinson, Jeffrey R.  
 APPLICANT: Uknes, Scott J.  
 APPLICANT: Ward, Eric R.  
 APPLICANT: Williams, Shericca C.  
 TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
 TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
 NUMBER OF SEQUENCES: 106  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: CIBA-GEIGY Corporation  
 STREET: 7 Skyline Drive  
 CITY: Hawthorne  
 STATE: New York  
 COUNTRY: USA  
 ZIP: 10532  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/455,416  
 FILING DATE: 31-MAY-1995  
 CLASSIFICATION: 800  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/181,271  
 FILING DATE: 13-JAN-94  
 APPLICATION NUMBER: US 08/093,301  
 FILING DATE: 16-JUL-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/937,197  
 FILING DATE: 6-NOV-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/678,378  
 FILING DATE: 1-APR-1991  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/305,566  
 FILING DATE: 6-FEB-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/165,667  
 FILING DATE: 8-MAR-1988  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/042,847  
 FILING DATE: 6-APR-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/632,441  
 FILING DATE: 21-DEC-1990  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/425,504  
 FILING DATE: 20-OCT-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/848,506  
 FILING DATE: 6-MAR-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/768,122  
 FILING DATE: 27-SEP-1991  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/580,431  
 FILING DATE: 7-SEP-1990  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/368,672  
 FILING DATE: 20-JUN-1989  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/329,018

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; FILING DATE: 24-MAR-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/045,957
; FILING DATE: 12-APR-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Elmer, James Scott
; REGISTRATION NUMBER: 36,129
; REFERENCE/DOCKET NUMBER: S-19825/PI/CGC 1727
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (919)541-8614
; TELEFAX: (919)541-8689
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 900 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; US-08-455-416--4

      Query Match          9.1%; Score 144.8; DB 1; Length 900;
      Best Local Similarity 60.5%; Pred. No. 4.8e-27;
      Matches 335; Conservative 0; Mismatches 197; Indels 22; Gaps 5;

QY      46  GGTATCTTTGTTGAAAAATTCGAAAGAACGTAGGACCACAT-----GGACCTTGGG 99
DB      607  GGCATCTTTCTCTTAAAAAATCTCGACAAATCAGTAGGCCCCACATGATCCAGGCCCATTTG 548

QY      100  TGCACAACAATTCGTGTCCTCCAAATGTGTCACAAGATTGTTACATCCTCCGGGTACTT 159
DB      547  TACAACAACAATTCATTGCTTTTATCACAGTATGCGGTGTTTATACATCCACCTTGTGTTT 488

QY      160  TAAGCTGACTAGGACCATTCACCAATTTATATTTGCCGTGCAATGAAATTGTGTGGCATTTCC 219
DB      487  TCAACTGTGCTGGGCATTTGTCGTTAATAGGTGCTGTGCATCTGAGATTACGACAT----- 432

QY      220  CTCACCTTGGAATTAGTCGGGGCGAAAGTCATCGGTATATTTAAATTCACATCAACATAAGAAA 279
DB      431  -----CCTCCATTTGTCGGGCTGAAATTCCTATGGGGATGTTAAATCCCATCAACAAGAGAGA 377

QY      280  TGTCCCAGAAATCTAAGTTGTTGCAACTGGTCCAAAGGGTACTCGGCTAGGGGTGTTTCGTG 339
DB      376  TGTGCGACAAAGTC---CTGAATGGGTGATTAAGTGCAAATTCAGCTTAAAGTGTTAGTG 320

QY      340  GTTTTGCCCCACCCGGTGTGCTGACGAGGACACCAACAATCCAGTCATGTCACGAACCTC 399
DB      319  CTTTTCCATAGCCTTGACACTCTTAACATCCGTTACAGTCTCCAGTCTCACAATTACCTC 260

QY      400  TACAGACACACCGAAGTTACATCCAGTACGACCCCATATACGTGCCATCGTAGTGCCCC 459
DB      259  GGGCACTGCCATCGAAGTTGCAATTTGGTTTCGACCCCAAAATTCGAGCGCTGGAGCTGTTCCTG 200

QY      460  TAGCGCATCAATGACCCCAATTTGGCCTCGATCGAGACGTCGGGGCACCGCCTATCGGGT 519
DB      199  GGTTCACATTAATGCTCCAAAGATTGGCCTGAGTCGAGCCGCGCTGCCCTCCACC--TGAGAGA 142

QY      520  CGATGCCGCCCAACCATGTATGGACAGTTGTTGGCGGTACCTCGATAGTCACAGCATAA 579
DB      141  GGCGCGGGCCAGACTGCTGTAGGTGCATTTGTTGAC--AATGTCAAAGTGGCAGCATGA 84

QY      580  GTGAAGTGCACAA 593
DB      83  GTAACGCTACAAA 70

```

APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christopher  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Ukeas, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericea C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
NUMBER OF SEQUENCES: 106  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,244  
FILING DATE: 31-MAY-1995  
CLASSIFICATION: 435  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: 08/181,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/678,378  
FILING DATE: 1-APR-1991  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT-1989  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018

FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
US-08-455-244-4  
Query Match 9.1%; Score 144.8; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 4.8e-27;  
Matches 335; Conservative 0; Mismatches 197; Indels 22; Gaps 5;  
Qy 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGACGTAGGACCAAT-----GGACCTTTGGG 99  
Db 607 GGCATCTTTCTTAAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548  
Qy 100 TGCACCAATATTGTTGCTCCCAATGTGTGACAGGATTTTACATCCTCGGGTACTT 159  
Db 547 TACAACAATATTTCATTTGTTTATCACAGTACATGGTGTGTATCATCCATCCCTTGTGTT 488  
Qy 160 TAAGTCAGCTAGGACATTTACCATTTATTTGCGGTGCATTTGAATTTGTGGCATTTCC 219  
Db 487 TCACTGTCTGGGCATTTGTTGTTAATAGTGTGTGTCATCTGAGATTACGACAT----- 432  
Qy 220 CTCACATTGGATTAGTCGGGGCGAAAGTCATCGGTATATTAAATCCATCACTAAAGAAA 279  
Db 431 -----CTCCATTTGGTGGGCTGAATTCATTTGGGATGTTAAATCCATCAACAAGAGA 377  
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Job time : 263.994 secs

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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

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Gapop 10.0 , Gapext 1.0

Searched: 6054689 seqs, 3103772919 residues

Total number of hits satisfying chosen parameters: 12109378

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications NA:  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1595	100.0	1595	21	US-10-903-948-1
3	1482.2	92.9	1598	13	US-10-051-307-2
4	1482.2	92.9	1598	21	US-10-903-948-2
5	1362.4	85.4	1546	13	US-10-051-307-3
6	1362.4	85.4	1546	21	US-10-903-948-3
7	293.4	18.4	510	17	US-10-341-961A-371

C	8	195.6	12.3	735	9	US-09-938-842A-2118	Sequence 2118, Ap
C	9	195.6	12.3	735	11	US-09-938-842A-2118	Sequence 2118, Ap
C	10	195.6	12.3	950	9	US-09-770-445-334	Sequence 334, App
C	11	173	10.8	1956	18	US-10-424-599-36321	Sequence 36321, A
C	12	170.4	10.7	875	18	US-10-636-396-4	Sequence 4, Appli
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C	14	167	10.5	909	18	US-10-424-599-103619	Sequence 103619, A
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C	22	124.2	7.8	699	15	US-10-259-163-109	Sequence 109, App
C	23	124.2	7.8	1052	19	US-10-437-963-89569	Sequence 89569, A
C	24	122.2	7.7	1020	15	US-10-259-163-571	Sequence 571, App
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C	27	120.4	7.5	879	17	US-10-260-238-49	Sequence 49, Appl
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C	29	119.8	7.5	1189	20	US-10-425-115-47685	Sequence 47685, A
C	30	118.8	7.4	805	17	US-10-260-238-4061	Sequence 4061, Ap
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C	32	116.8	7.3	911	18	US-10-425-114-27634	Sequence 27634, A
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C	35	106.8	6.7	343	9	US-09-770-791-806	Sequence 806, App
C	36	106.2	6.7	808	9	US-09-966-881-46	Sequence 46, Appl
C	37	103.4	6.5	634	20	US-10-425-115-10104	Sequence 10104, A
C	38	103.2	6.5	633	15	US-10-259-163-532	Sequence 532, App
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C	41	94.4	5.9	1338	20	US-10-425-115-19747	Sequence 19747, A
C	42	94.2	5.9	3630	19	US-10-437-963-16245	Sequence 16245, A
C	43	90.6	5.7	621	14	US-10-175-389-1	Sequence 1, Appli
C	44	89.6	5.6	1049	19	US-10-767-701-14803	Sequence 14803, A
C	45	89	5.6	621	14	US-10-175-389-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1

US-10-051-307-1  
; Sequence 1, Application US/10051307  
; Publication No. US20020170095A1  
; GENERAL INFORMATION:  
; APPLICANT: DAI, ZIYU  
; APPLICANT: SHI, LIFANG  
; APPLICANT: HOOKER, BRIAN S.  
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF  
; FILE REFERENCE: 059440/0141  
; CURRENT APPLICATION NUMBER: US/10/051,307  
; PRIOR FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,224  
; PRIOR FILING DATE: 2001-01-23  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 1595  
; TYPE: DNA  
; ORGANISM: Solanum tuberosum  
US-10-051-307-1

Query Match 100.0%; Score 1595; DB 13; Length 1595;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1595; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 GTAATACGACTACTACTATAGGCGACGGTGTGTGACGCGCCCTGGCTGTACTTTGTTGA 60





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Db  
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US-10-903-948-2  
; Sequence 2, Application US/10903948  
; Publication No. US20050005324A1  
; GENERAL INFORMATION:  
; APPLICANT: DAI, ZIYU  
; APPLICANT: SHI, LIFANG  
; APPLICANT: HOOKER, BRIAN S.  
; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF  
; FILE REFERENCE: 059440/0141  
; CURRENT APPLICATION NUMBER: US/10/903,948  
; CURRENT FILING DATE: 2004-07-30  
; PRIOR APPLICATION NUMBER: US/10/051,307  
; PRIOR FILING DATE: 2002-01-22  
; PRIOR APPLICATION NUMBER: 60/263,224  
; PRIOR FILING DATE: 2001-01-23  
; NUMBER OF SEQ ID NOS: 14  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2  
; LENGTH: 1598  
; TYPE: DNA  
; ORGANISM: Solanum tuberosum  
US-10-903-948-2

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Best Local Similarity 96.7%; Pred. No. 2,1e-311;  
Matches 1546; Conservative 0; Mismatches 48; Indels 5; Gaps 3;  
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QY 1185 GACAGTGTGTTGATTTTCTTAGTCTAGATGGAGTCACACATTTAGTGAATATCT 1244
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## RESULT 6

US-10-903-948-3

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; Sequence 3, Application US/10903948
; Publication NO. US20050005324A1
; GENERAL INFORMATION:
; APPLICANT: DAI, ZIYU
; APPLICANT: SHI, LIPANG
; APPLICANT: HOOKER, BRIAN S.
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; TITLE OF INVENTION: GENE PROMOTERS ISOLATED FROM POTATO AND USE THEREOF
; FILE REFERENCE: 059440/0141
; CURRENT APPLICATION NUMBER: US/10/903,948
; CURRENT FILING DATE: 2004-07-30
; PRIOR APPLICATION NUMBER: US/10/051,307
; PRIOR FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: 60/263,224
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 1546
; TYPE: DNA
; ORGANISM: Solanum tuberosum
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1248)
; OTHER INFORMATION: a, t, c or g
US-10-903-948-3
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Query Match 85.4%; Score 1362.4; DB 21; Length 1546;
Best Local Similarity 94.1%; Pred. No. 2.1e-285;
Matches 1460; Conservative 0; Mismatches 82; Indels 9; Gaps 4;
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QY 109 ATTGTTGCTCTCCAAATGTTGATCAAGGATTTGTATACATCTCCGGGTACTTTAAAGTTGAC 168
Db 61 ATTGTTGCTCTCCAAATGTTGATCAAGGATTTGTATACATCTCCGGGTACTTTAAAGTTGAC 120
QY 169 CAGGCAATTCACCAATTTATATTTGCGTGCATTTGAATTTGTGTCATTTCCCTCCACATTG 228
Db 121 TAGGACATTCACCAATTTATATTTGCGTGCATTTGAATTTGTGTCATTTCCCTCCACATTG 180
QY 229 GATTAGTCGGGGCGGAAGTCATCGGTATTTAAATCCATCAACTAAAGAAATGTCCCAAG 288
Db 181 GATTAGTCGGGGCGGAAGTCATCGGTATTTAAATCCATCAACTAAAGAAATGTCCCAAG 240
QY 289 AATCTAAGTGTGTTAACTGGTCCAAAGCGTACTCGGCTAGGCTGTTTGGTGGTTTGGCCCC 348
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QY 349 ACCCGGTGCATGCAAGGACACACCAATCAACAGTCATGCAAGAACTCTTACCAGCAC 408
Db 301 ACCCGGTGCATGCAAGGACACACCAATCAACAGTCATGCAAGAACTCTTACCAGCAC 360
QY 409 CATCGAAGTTACATCCAGTACGACCCCATATACCTGCCATCGTAGTGCCTTAGGCGCAT 468
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QY 469 CAATGACCCACATTTTGGCCCCGATCGAAAACGTCCG-CAACCGCTTTTCGGGGTCGATGCGG 527
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Db 481 CCCAGACGTTGATGGAACAGTGTTCCTA CTTCCATAGTGGCAGCATAAAGTGAAGTCA 540
QY 588 CAAAGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 647
Db 541 CAAAGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 600
QY 648 ATATGTGACAAATTAATTTTGGTACTTTATATATAGGATATGGCGCTTTTGGCACTA 707
Db 601 ATATGTGACAAATTAATTTTGGTACTTTATATATAGGATATGGCGCTTTTGGCACTA 660
QY 708 CGGATATTAATCGTATATATATAGCAATATCATACCTTTGCACTAATTAATAACGAAATATAT 767
Db 661 TGGATATTAATCGTATATATATAGCAATATCATACCTTTGCACTAATTAATAACGAAATATAT 720
QY 768 TACAATATGATTTGGTAAACGTTGAGGTGGGAAATATGATTAAGAGCCGCCCTTAATAATTA 827
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Db 721 TACAATATGATTTGGTAAACGTTGAGTGGCAAAATGTATAAGACCGCTAAATAATTA 780  
Qy 828 TTATTTTATGAATATAGCTTATAGTAACTTAACTTTATTTGGTGATACTTTTGACAT 887  
Db 781 TTATTTTATGAATATAGCTTATAGTAACTTAACTTTATTTGGTGATACTTTTGACAT 840  
Qy 888 ATAACTCTGTAAGTGAAGGAAATTTTCTTAAACTAAATATTAATAAGCAGCTATTTT 947  
Db 841 ATAACTCTGTAAGTGAAGGAAATTTTCTTAAACTAAATATTAATAAGCAGCTATTTT 900  
Qy 948 CAGATTTTCTGCGCCAAAGTTCTTCATATCTTATCTATGCCCATTTTATCTTTATCG 1007  
Db 901 AATATTTTCTGCGCCAAAGTTCTTCATATCTTATCTATGCCCATTTTATCTTTATCG 960  
Qy 1008 TTCTAGCTCTTAGTATACACGCTTTGAACATATAAAATCATATAAAATTTGAAAGTAAAAAT 1067  
Db 961 TTCTAGCTCTTAGTATACACGCTTTGAACATATAAAATCATATAAAATTTGAAAGTAAAAAT 1020  
Qy 1068 AGTTTTTTTTTTCATATTTACTCTGAGGATCATTTTGTAGATCAATCTGAAATATACAA 1127  
Db 1021 AG---TTTTTTTTTTCATATTTACTCTGATGATCAATTTGTAGATCAATCTGAAATATACAA 1077  
Qy 1128 ACCATTTCTGATTTTAAATACACACCATTTCTGCAAGGGAGTCTAT---GTGATCGT 1184  
Db 1078 ATCAATTTCTGATTTTAAATATCAATCTTCTGCAAGGATGGAACGCTCTATGGTGATTCGT 1137  
Qy 1185 GACAAGTGGTTGATTTATTTCTAGTCTAGATTTGAGTCAACAACTTTTGTAGTCAAAATATCT 1244  
Db 1138 GACAAGTGGTTGATTTATTTCTAGTCTAGATTTGAGTCAACAACTTTTGTAGTCAAAATATCT 1197  
Qy 1245 ATTAAGAAAGCCCTATTGATGCAAAATATCTTATTAAGAAAGCCCTATTCATGCTTTATT 1304  
Db 1198 ATTAAGAAAGCCCTATTGATGCAAAAGTCAATAA---TATTTAATATCATNCTTTATT 1255  
Qy 1305 TATTTTACGATCGGAGATGATATATTTACTAATTAATAATTAATAATTTGGAAGGAATGAT 1364  
Db 1256 TATTTTACGATCGGAGATGATATATTTACTAATTAATAATTAATAATTTGGAAGGAATGAT 1315  
Qy 1365 CGACAAGTCAATCAAGCTTATCGTCAATCCATTAATAATTAATAATTTGGAAGGAATGAT 1424  
Db 1316 CGACAAGTCAATCAAGCTTATCGTCAATCCATTAATAATTAATAATTTGGAAGGAATGAT 1375  
Qy 1425 AGAGAAACAGTGGATCATGTATATTTAGTTTTTAAATATCTCTCTATAATATCTATAT 1484  
Db 1376 AGAGAAACAGTGGATCATGTATATTTAGTTTTTCCCTATCTCTCTATAATATCTATAT 1435  
Qy 1485 ATACCTCTAAACTTAAATGCAATCTAACAACAATAATTAATAATTTTAAAGAAA 1544  
Db 1436 ATACCTCTAAACTTAAATGCAATCTAACAACAATAATTAATAATTTTAAAGAAA 1495  
Qy 1545 TTGCAGAAATTAATGGAGGCAAAATAGTCTATGTTGAGTTGGTCTTTC 1595  
Db 1496 TTGCAGAAATTAATGGAGGCAAAATAGTCTATGTTGAGTTGGTCTTTC 1546

RESULT 7  
US-10-341-961A-371/c  
; Sequence 371, Application US/10341961A  
; Publication No. US2004000678A1  
; GENERAL INFORMATION:  
; APPLICANT: Boyce Thompson Institute for Plant Research, Inc.  
; APPLICANT: Crasta, Oswald  
; APPLICANT: Swirsky, Peter  
; APPLICANT: Mysore, Kiran  
; APPLICANT: Folkerts, Otto  
; APPLICANT: Martin, Gregory  
; APPLICANT: Ekengren, Sophia  
; TITLE OF INVENTION: PLANT DEFENSE-RELATED GENES REGULATED IN RESPONSE TO PLANT-PATHOGEN  
; FILE REFERENCE: BTI.67A2  
; CURRENT APPLICATION NUMBER: US/10/341.961A

; CURRENT FILING DATE: 2003-01-14  
; PRIOR APPLICATION NUMBER: 60390249  
; PRIOR FILING DATE: 2002-06-20  
; PRIOR APPLICATION NUMBER: 60261029  
; PRIOR FILING DATE: 2001-01-11  
; PRIOR APPLICATION NUMBER: 60348792  
; PRIOR FILING DATE: 2002-01-14  
; NUMBER OF SEQ ID NOS: 395  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 371  
; LENGTH: 510  
; TYPE: DNA  
; ORGANISM: Lycopodium esculentum  
US-10-341-961A-371  
Query Match 18.4%; Score 293.4; DB 17; Length 510;  
Best Local Similarity 78.5%; Pred. No. 1.6e-53;  
Matches 351; Conservative 0; Mismatches 96; Indels 0; Gaps 0;  
Qy 49 ATCTTTGTTTGAATAAATTCGAAAGAACGTAGGACCAATGGAACCTTTGGGTGCAACAAT 108  
Db 448 ATCTTTGTTTGAATAAATTCGAAATTCAGTAGGACCAATGGAACCTTTGGGTGCAACAAT 389  
Qy 109 ATTGTTGTTCTCCAAATGCTGTACAAAGATTTGTACATCTCTCCGGGTACTTTAAGTTGAC 168  
Db 388 ATTGTTGTTCTCCAAATGCTGTACAAAGATTTGTACATCTCTCCGGGTACTTTAAGTTGAC 329  
Qy 169 CAGGGCATTCACCAATTTATTTTGGCGTGCAATTTGTTGGTCAATTTCCCTCCACTTG 228  
Db 328 CAGGGCATTCACCAATTTATTTTGGCTGTGCAATTTGGAATTTGATGATCATTTTCCAGGGCAG 269  
Qy 229 GATTAGTGGGGGAAAGTCAATCGGTATATTAATCCATCAACTTAAAGAAATGTCCCAAG 288  
Db 268 GCTTAGTGGGCAAAAGACATAGGATTTTGAATCCATCAATAAGAAATATCCCAAA 209  
Qy 289 AATCTAAGTTTGTGAATCTGTCCAGGCGTACTCGGCTAGGCTGTTTGGTGGTTGGCCCC 348  
Db 208 AATCTAAGTTTGTGAATCTGTCCAGGCGTACTCGGCTAGGCTGTTTGGTGGTTGGCCCC 149  
Qy 349 ACCGGTGTCACTGAGGACCAACCAATCACCAGTCAATGACAGCACTTACAGCAC 408  
Db 148 ATCTTTTGCATCCAGGATCCACCAATCACCAGTCAATGACAGCACTTACAGCAC 89  
Qy 409 CATCGAAGTTTACATCCAGTACGACCCCATATATCTGCTGATGCTAGTGCCTTAGCGCGAT 468  
Db 88 CATCAAGTTTGAATTTAGTAGGACCCCAATATAGTGCAATTTTAGTGCCAGGTGGGGCCC 29  
Qy 469 CAATGACCCCAATTTGGCCCCGATCGA 495  
Db 28 AAAACCAACCACTCTGACCTCTCTCGA 2  
RESULT 8  
US-09-938-842A-2118/c  
; Sequence 2118, Application US/09938842A  
; Patent No. US20020160378A1  
; GENERAL INFORMATION:  
; APPLICANT: Harper, Jeff  
; APPLICANT: Kreps, Joel  
; APPLICANT: Wang, Xun  
; APPLICANT: Zhu, Tong  
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING  
; FILE REFERENCE: SCRI1300-3  
; CURRENT APPLICATION NUMBER: US/09/938.842A  
; CURRENT FILING DATE: 2001-08-24  
; PRIOR APPLICATION NUMBER: US 60/227,866  
; PRIOR FILING DATE: 2000-08-24  
; PRIOR APPLICATION NUMBER: US 60/264,647  
; PRIOR FILING DATE: 2001-01-16  
; PRIOR APPLICATION NUMBER: US 60/300,111  
; PRIOR FILING DATE: 2001-06-22  
; NUMBER OF SEQ ID NOS: 5379

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; SEQ ID NO 2118
; LENGTH: 735
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-2118

Query Match      12.3%; Score 195.6; DB 9; Length 735;
Best Local Similarity 62.3%; Pred. No. 3.2e-32;
Matches 365; Conservative 0; Mismatches 204; Indels 17; Gaps 3;

QY 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGACGTAGGACCAATG-----GACCTTGGG 99
Db 586 GGCATCTCTGCTTAAAGAAATCTTGAGTACTCAGTATCGTACATGATCCCTGACCGTTGCG 527
QY 100 TGCACAAATATTTGTTCTCTCAAAATGTTGTTACAAAGGATTTGTTACATCTCCGGTACTTT 159
Db 526 TACAACAGTATTTGGTTCTGCTGAAATACAGTACACGGGTTGTTGATCCACCTCGGGGCTC 467
QY 160 TAAAGTTGACAGGCAATTCACCATTTATTTTCCCGTGCATTTGAATTTGTGGCATTTTCC 219
Db 466 TCAACAGCTTTGGACATTTGTCGTTTATGTTCCGGTACATAGTATCCGATGGCAGTTTC- 408
QY 220 CTCACCTTTGGATTTAGTCGGGGCGAAAGTCATCGGTATATTTAAATCCATCAACTAAAGAAA 279
Db 407 -----GAAGTGTGGGCTAAACTCCATAGGTATGTTAAATCCATCGACAAGTGAGA 356
QY 280 TGTCCAGAAATCTAAGTTTGTGAATCGTCCAGGGCGTACTCGGCTAGGGTGTGGTG 339
Db 355 TATCGTAGAAGTCTAAGTTTGTGAATTTGTTTCAAGAGCGTACTCAGCCAAACGTGTTGGTG 296
QY 340 GTTTCGCCCCACCCGTCAGTGCAGGACACACCAACATCAACAGTCATGACGAAACCTC 399
Db 295 GCTGTCCCGACGAGTACATTTGGAGTCCACCACTGCGAGTCACAGTTTGGCATCGGCCAC 236
QY 400 TACGAGCACCATCGAAGTTTACATCCAGTACGACGACCCCATATATCTGCCATCGTAGTGCCTC 459
Db 235 GACCTGAGGAGTCAAAAGTTTACAATTTGGTCTTACCCCAATCCGTGCCATTTTAGTGCCCG 176
QY 460 TAGGGCGATCAATGACCCACATTTGGCCCGCATCGAAACGTCGGCACCGGCTTCGGGGT 519
Db 175 CCGCGACATCTAGCCTCCATGATTTGGCCGAGCATCTAGACGTGG--CCACCTCCAGGGCT 118
QY 520 CGATGCCGCCCAAGCATGTATGGACAGTGTGTGGTACCTCGATAGTGGGAGCATTAAGT 579
Db 117 TCGCGACGCCACACGGTGTAACTACATTTGGTTTAGGATTTTGAATGTGGCGGCTGTTGC 58
QY 580 GAAAGTCAAAAGCAAGAGGAGGAGAAACAAAAGAGATCTCAAG 625
Db 57 GGTGAGATGAGCAAAAGTGGCGGAAATATGAAAGTAGAGACCAAG 12
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RESULT 9
US-09-938-842A-2118/c
; Sequence 2118, Application US/09938842A
; Publication No. US20040009476A9
; GENERAL INFORMATION:
; APPLICANT: Harper, Jeff
; APPLICANT: Kreps, Joel
; APPLICANT: Wang, Xun
; APPLICANT: Zhu, Tong
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
; TITLE OF INVENTION: SAME, AND METHODS OF USE
; FILE REFERENCE: SCRIPT300-3
; CURRENT APPLICATION NUMBER: US/09/938,842A
; CURRENT FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: US 60/227,866
; PRIOR FILING DATE: 2000-08-24
; PRIOR APPLICATION NUMBER: US 60/264,647
; PRIOR FILING DATE: 2001-01-16
; PRIOR APPLICATION NUMBER: US 60/300,111
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 5379
; SEQ ID NO 2118
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; LENGTH: 735
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-2118

Query Match      12.3%; Score 195.6; DB 11; Length 735;
Best Local Similarity 62.3%; Pred. No. 3.2e-32;
Matches 365; Conservative 0; Mismatches 204; Indels 17; Gaps 3;

QY 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGACGTAGGACCAATG-----GACCTTGGG 99
Db 586 GGCATCTCTGCTTAAAGAAATCTTGAGTACTCAGTATCGTACATGATCCCTGACCGTTGCG 527
QY 100 TGCACAAATATTTGTTCTCTCAAAATGTTGTTACAAAGGATTTGTTACATCTCCGGTACTTT 159
Db 526 TACAACAGTATTTGGTTCTGCTGAAATACAGTACACGGGTTGTTGATCCACCTCGGGGCTC 467
QY 160 TAAAGTTGACAGGCAATTCACCATTTATTTTCCCGTGCATTTGAATTTGTGGCATTTTCC 219
Db 466 TCAACAGCTTTGGACATTTGTCGTTTATGTTCCGGTACATAGTATCCGATGGCAGTTTC- 408
QY 220 CTCACCTTTGGATTTAGTCGGGGCGAAAGTCATCGGTATATTTAAATCCATCAACTAAAGAAA 279
Db 407 -----GAAGTGTGGGCTAAACTCCATAGGTATGTTAAATCCATCGACAAGTGAGA 356
QY 280 TGTCCAGAAATCTAAGTTTGTGAATCGTCCAGGGCGTACTCGGCTAGGGTGTGGTG 339
Db 355 TATCGTAGAAGTCTAAGTTTGTGAATTTGTTTCAAGAGCGTACTCAGCCAAACGTGTTGGTG 296
QY 340 GTTTCGCCCCACCCGTCAGTGCAGGACACACCAACATCAACAGTCATGACGAAACCTC 399
Db 295 GCTGTCCCGACGAGTACATTTGGAGTCCACCACTGCGAGTCACAGTTTGGCATCGGCCAC 236
QY 400 TACGAGCACCATCGAAGTTTACATCCAGTACGACGACCCCATATATCTGCCATCGTAGTGCCTC 459
Db 235 GACCTGAGGAGTCAAAAGTTTACAATTTGGTCTTACCCCAATCCGTGCCATTTTAGTGCCCG 176
QY 460 TAGGGCGATCAATGACCCACATTTGGCCCGCATCGAAACGTCGGCACCGGCTTCGGGGT 519
Db 175 CCGCGACATCTAGCCTCCATGATTTGGCCGAGCATCTAGACGTGG--CCACCTCCAGGGCT 118
QY 520 CGATGCCGCCCAAGCATGTATGGACAGTGTGTGGTACCTCGATAGTGGGAGCATTAAGT 579
Db 117 TCGCGACGCCACACGGTGTAACTACATTTGGTTTAGGATTTTGAATGTGGCGGCTGTTGC 58
QY 580 GAAAGTCAAAAGCAAGAGGAGGAGAAACAAAAGAGATCTCAAG 625
Db 57 GGTGAGATGAGCAAAAGTGGCGGAAATATGAAAGTAGAGACCAAG 12
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RESULT 10
US-09-770-445-334/c
; Sequence 334, Application US/09770445
; Patent No. US20020023281A1
; GENERAL INFORMATION:
; APPLICANT: Goriach, Jorn
; APPLICANT: An, Yong-Qiang
; APPLICANT: Hamilton, Carol M.
; APPLICANT: Price, Jennifer L.
; APPLICANT: Raines, Tracy M.
; APPLICANT: Yu, Yang
; APPLICANT: Rameaka, Joshua G.
; APPLICANT: Page, Amy
; APPLICANT: Matthew, Abraham V.
; APPLICANT: Ledford, Brooke L.
; APPLICANT: Woessner, Jeffrey P.
; APPLICANT: Haas, William David
; APPLICANT: Garcia, Carlos A.
; APPLICANT: Krickler, Maja
; APPLICANT: Slader, Ted
; APPLICANT: Davis, Keith R.
; APPLICANT: Allen, Keith
; APPLICANT: Hoffman, Neil
```







FILE REFERENCE: 38-21(53223)B  
CURRENT APPLICATION NUMBER: US/10/424,599  
CURRENT FILING DATE: 2003-04-28  
NUMBER OF SEQ ID NOS: 285684  
SEQ ID NO 101619  
LENGTH: 909  
TYPE: DNA  
ORGANISM: Glycine max  
FEATURE:  
OTHER INFORMATION: Clone ID: PAT\_MRT3847\_64586C.1  
US-10-424-599-103619

Query Match 10.5%; Score 167; DB 18; Length 909;  
Best Local Similarity 60.7%; Pred. No. 5.7e-26;  
Matches 327; Conservative 0; Mismatches 205; Indels 7; Gaps 3;

Qy	46	GGTATCTTTGTTTGAAAAAATTGGAAGAAGACGTAGGACACACATGACCTTGGTGGTCAAC	105
Db	631	GGCACCTTTGCTTTGAAGNATCTGATATACAGTGGGCCACACGACTACCGAATTGCAAC	572
Qy	106	AATATTGTTGTCCTCCAAATGTGGTCAAGAGATTGTTACATCTCCGGGTACTTTAAGTT	165
Db	571	AGTACTGGTCGGTTTGAAGACAGCTCAAGGGTTGTTGCAACCTCTTGGTCTTTAGCT	512
Qy	166	GACAGGGCANTCACCATTTATATTTGCCGTGCAATGAAATGTGTGGCATTTCCCTCCAC	225
Db	511	CACTAGGGCACTGTCCGTTAATGTCCGCACTGCA---GCTTATGCCACGTGTGCATCCAT	455
Qy	226	TTGGATTAGTCGGGGCGAAGTCACTCGGTATATTAATCCATCAACTAAGAAATCTCCC	285
Db	454	TCG---AGGTTGGACATTAAGTCCATGGGCACTTTAAACCCGTGACGAGGAGATGTGCA	398
Qy	286	AGAAATCTAAGTTGTTGAACTGGTCCAAAGCGCTACTCGGCTAGGGGTGTTGGTGGTTGC	345
Db	397	AGAACTCAATTTGTTGAACCCGTTTCAAGCCGTTATTCAGCCAGGGTGTTCGGAGGCGCAC	338
Qy	346	CCCAACCGGTGCACTGCAGGACACCAACAATCACCACTATGTCAGCAACCTCTTACCAG	405
Db	337	CGTAAGCTTTGCACTCGAGGACACCCCGCAGTCAACGGTCTGGCATCCACCGCGCCCG	278
Qy	406	CACATCGAAGTTACATCCAGTAGGACCCCATATACCTGCGCATCTAGTGCCTTAGGCG	465
Db	277	AACCGTCGAAGTTGACGCGGTTTCGGGCCCAACGCGGGCCCTTTCTGTTCTGCAAGCA	218
Qy	466	CATCAATGACCCCAATTTGGCCCCGATTCGAAAAGTTCGGCACCCGCTTTTCGGGGTC-GATG	524
Db	217	CGTCCACGACCATGACTGCGCCGGTTTAAATTGACGCCACCGCCCAACAGGCACAGACG	158
Qy	525	CCGCCCCAAACGATGTATGGAACAGTTGTCGTTGCGGTACCTCGATAGTGGCAGCAATAAGTAAA	583
Db	157	CAGCCCCAGACAGTGTATGTGCATCGGTTTCTGTGATTTCAAACCTTTGCAGCATATGCGAA	99

RESULT 15  
US-10-259-165-389/c  
Sequence 389, Application US/10259165  
Publication No. US20030135888A1  
GENERAL INFORMATION:  
APPLICANT: Zhu, Tong  
APPLICANT: Wang, Xun  
APPLICANT: Chang, Hur-Bong  
APPLICANT: Briggs, Steven P.  
APPLICANT: Cooper, Bret  
APPLICANT: Glazebrook, Jane  
APPLICANT: Goff, Stephen A.  
APPLICANT: Katagiri, Fumiaki  
APPLICANT: Kreps, Joel  
APPLICANT: Moughamer, Todd  
APPLICANT: Provart, Nicholas  
APPLICANT: Ricke, Darrell  
TITLE OF INVENTION: GENES THAT ARE MODULATED BY POSTTRANSCRIPTIONAL GENE SILENCING  
FILE REFERENCE: 70030-NP  
CURRENT APPLICATION NUMBER: US/10/259,165



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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: June 17, 2005, 17:23:59 ; Search time 260.504 Seconds  
(without alignments)  
10018.495 Million cell updates/sec

Title: US-10-051-307-1

Perfect score: 1595

Sequence: 1 gtaatacgactcactatagg.....tggtgaagttggtgtttc 1595

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents, NA:\*

1: /cgm2\_6/ptodata/1/ina/5A COMB.seq:\*

2: /cgm2\_6/ptodata/1/ina/5B COMB.seq:\*

3: /cgm2\_6/ptodata/1/ina/6A COMB.seq:\*

4: /cgm2\_6/ptodata/1/ina/6B COMB.seq:\*

5: /cgm2\_6/ptodata/1/ina/PCTUS COMB.seq:\*

6: /cgm2\_6/ptodata/1/ina/backfiles.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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C 2	430.2	27.0	883	1	US-07-828-798C-4
C 3	430.2	27.0	883	2	US-08-315-868A-4
C 4	430.2	27.0	883	3	US-08-495-819B-4
C 5	430.2	27.0	884	1	US-07-828-798C-5
C 6	430.2	27.0	884	2	US-08-315-868A-5
C 7	430.2	27.0	884	3	US-08-495-819B-5
C 8	170.4	10.7	875	4	US-09-589-733C-4
C 9	155.2	9.7	900	1	US-08-181-271A-4
C 10	155.2	9.7	900	1	US-08-449-315-4
C 11	155.2	9.7	900	1	US-08-444-803-4
C 12	155.2	9.7	900	1	US-08-449-043-4
C 13	155.2	9.7	900	1	US-08-456-265A-4
C 14	155.2	9.7	900	1	US-08-455-416-4
C 15	155.2	9.7	900	1	US-08-455-244-4
C 16	155.2	9.7	900	1	US-08-454-876-4
C 17	155.2	9.7	900	2	US-08-457-364-4
C 18	155.2	9.7	900	2	US-08-456-262-4
C 19	155.2	9.7	900	2	US-08-456-240-4
C 20	155.2	9.7	900	2	US-08-455-736-4
C 21	155.2	9.7	900	2	US-08-971-217-4
C 22	155.2	9.7	900	3	US-09-350-600-4
C 23	155.2	9.7	900	4	US-09-906-234-4
C 24	149	9.3	910	4	US-03-685-232-1
C 25	106.4	6.7	894	1	US-08-178-708-7
C 26	106.4	6.7	894	1	US-08-457-552-7
C 27	106.4	6.7	894	1	US-08-456-430-7

Query Match 30.0%; Score 479.2; DB 1; Length 3033;

C 28 106.4 6.7 894 2 US-08-994-418-7 Sequence 7, Appli

C 29 106.4 6.7 894 5 PCT-US95-00432-7 Sequence 7, Appli

C 30 97.4 6.1 1309 6 5221624-4 Patent No. 5221624

C 31 97.4 6.1 1309 6 5221624-4 Patent No. 5221624

C 32 90.6 5.7 621 3 US-09-224-514A-1 Sequence 1, Appli

C 33 90.6 5.7 621 6 5221624-31 Patent No. 5221624

C 34 90.6 5.7 621 6 5221624-31 Patent No. 5221624

C 35 89 5.6 621 3 US-09-224-514A-9 Sequence 9, Appli

C 36 86.2 5.4 624 2 US-08-426-599B-3 Sequence 3, Appli

C 37 78.4 4.9 624 2 US-08-426-599B-1 Sequence 1, Appli

C 38 73.2 4.6 2051 1 US-08-482-037A-2 Sequence 2, Appli

C 39 64.6 4.1 230 4 US-09-589-733C-28 Sequence 28, Appli

C 40 64 4.0 1141 4 US-09-806-708B-22 Sequence 22, Appli

C 41 60.8 3.8 1141 4 US-09-806-708B-22 Sequence 22, Appli

C 42 60.8 3.7 205044 4 US-09-790-988-1 Sequence 1, Appli

C 43 59.2 3.7 205044 4 US-09-949-016-15851 Sequence 15851, A

C 44 59.2 3.7 205044 4 US-09-949-016-15852 Sequence 15852, A

C 45 59.2 3.7 205044 4 US-09-949-016-15853 Sequence 15853, A

## ALIGNMENTS

RESULT 1

US-08-482-037A-1/c

Sequence 1, Application US/08482037A

Patent No. 5801028

GENERAL INFORMATION:

APPLICANT: Ray Bressan and Paul M. Hasegawa

TITLE OF INVENTION: Osmotin Gene Promoter and Use Thereof

NUMBER OF SEQUENCES: 2

CORRESPONDENCE ADDRESS:

ADDRESSEE: Thomas O. Henry

STREET: Bank One Tower, Suite 3700, 111 Monument Circle

CITY: Indianapolis

STATE: Indiana

COUNTRY: USA

ZIP: 46204-5137

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb storage

COMPUTER: COMPAQ

OPERATING SYSTEM: MSDOS

SOFTWARE: ASCII

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/482,037A

FILING DATE: June 7, 1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/476,243

FILING DATE: June 7, 1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/180,428

FILING DATE: January 12, 1994

APPLICATION NUMBER: 08/065,147

FILING DATE: May 20, 1993

ATTORNEY/AGENT INFORMATION:

NAME: Thomas Q. Henry

REGISTRATION NUMBER: 28,309

REFERENCE/DOCKET NUMBER: 7024-8/PUR16CIPDIVII

TELECOMMUNICATION INFORMATION:

TELEPHONE: (317) 634-3456

TELEFAX: (317) 637-7561

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 3033 bases

TYPE: Nucleotide/Amino Acid

STRANDEDNESS: Double

TOPOLOGY: Linear

MOLECULE TYPE: Genomic DNA

US-08-482-037A-1





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; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/315,868
; FILING DATE: 30-SEPT-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/828,798
; FILING DATE: 06-APRIL-92
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/NL91/00089
; FILING DATE: 31-05-91
; ATTORNEY/AGENT INFORMATION:
; NAME: Mass, Clifford J.
; REGISTRATION NUMBER: 30086
; REFERENCE/DOCKET NUMBER: U-010255-1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 708-1800
; TELEFAX: (212) 246-8959
; TELEX: 233288
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 883
; TYPE: Nucleotide
; STRANDEDNESS: Double
; TOPOLOGY: Linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Nicotiana tabacum
; US-08-495-819B-4

Query Match 27.0%; Score 430.2; DB 3; Length 883;
Best Local Similarity 84.1%; Pred. No. 9.2e-96;
Matches 497; Conservative 0; Mismatches 93; Indels 1; Gaps 1;

QY 46 GGTATCTTTGTTGAAAAAATTGGAAGAACAGTAGGACCAATGGACCTTGGGGTGAAC 105
Db 605 GGCATCTTTGTTGAAAAAATTGAGAAAAATGTAGGACCAAGGTCTTGTGTGCAAC 546

QY 106 ATATTTGTCTCCCAATGTGTGACAGGATTTGATCATCTCCGGGTACTTTAAGTT 165
Db 545 AATATTTGTCTCCGAATGTAGTACAGGGTTATTACATCTCCGGGAACCTTAAGTT 486

QY 166 GACCAAGGCATTCACCATTTATTTGCGGTGCAATTTGAATTTGTGGCAATTTCCCTCCAC 225
Db 485 CGCGGGACATTCGCGGTTTATTTAGCCGTACATGATTTGCATGGCATTTCCCTCCAC 426

QY 226 TTGGATTAGTCGGGGCAAGTTCATCGGTATATTAATCCATCACTAAAGAAATGTCCC 285
Db 425 TAGGTTAGTCGGGGCAAGTTCATCGGAATGTTGAAATCCATCACTAAAGAAATGTCCC 366

Query Match 27.0%; Score 430.2; DB 1; Length 884;
Best Local Similarity 84.1%; Pred. No. 9.2e-96;
Matches 497; Conservative 0; Mismatches 93; Indels 1; Gaps 1;

QY 46 GGTATCTTTGTTGAAAAAATTGGAAGAACAGTAGGACCAATGGACCTTGGGGTGAAC 105
Db 605 GGCATCTTTGTTGAAAAAATTGAGAAAAATGTAGGACCAAGGTCTTGTGTGCAAC 546

QY 106 AATATTTGTCTCCCAATGTGTGACAGGATTTGATCATCTCCGGGTACTTTAAGTT 165
Db 545 AATATTTGTCTCCGAATGTAGTACAGGGTTATTACATCTCCGGGAACCTTAAGTT 486

QY 166 GACCAAGGCATTCACCATTTATTTGCGGTGCAATTTGAATTTGTGGCAATTTCCCTCCAC 225
Db 485 CGCGGGACATTCGCGGTTTATTTAGCCGTACATGATTTGCATGGCATTTCCCTCCAC 426

QY 226 TTGGATTAGTCGGGGCAAGTTCATCGGTATATTAATCCATCACTAAAGAAATGTCCC 285
Db 425 TAGGTTAGTCGGGGCAAGTTCATCGGAATGTTGAAATCCATCACTAAAGAAATGTCCC 366

QY 286 AGAATCTAAGTTGTGTAAGTGTCCAGGCGTACTCGGCTAGGAGTGTGGTGGTTTC 345
Db 365 AGAATCTAAGTGTGTAAGTGTCCAGGCGTACTCGGCTAGGAGTGTGGTGGTTTC 306

QY 346 CCCACCGGTGCACTGCAGGACCAACCAATCACCAGTCAATGCACGAACCTCTACCAG 405
Db 305 CCCACCGGTGCACTGCAGGACCAACCAATCACCAGTCAATGCACGAACCTCTACCAG 246

QY 406 CACCATCGAAGTTACATCCAGTACGACCCCATATACCTGCCATCGTAGTGCCCTTAGCG 465
Db 245 CAGCATTGAAGTTACATCCAGTACGACCCCATATACCTGCCATCGTAGTGCCCTTAGCG 186

QY 466 CATCATGACCCACATTTGGCCCGCATCGAAGCGTCGG-CACCCGCTTCGGGGTCGATG 524
Db 185 CATTCATCACCACATTTGGCCCGCATCGAAGCGTCGG-CACCCGCTTCGGGGTCGATG 126

QY 525 CGGCCCAACAGTGTATGACAGTGTGTGCGTACCTCGATGATGCGCAGCATAAAGTAAAG 584
Db 125 CGGCCCAACAGTGTATGACAGTGTGTGCGTACCTCGATGATGCGCAGCATAAAGTAAAG 66

QY 585 TCACAAAAGCAAGAGGGAGAAAAACAAAGAAAGATCTCAAGTAGCCCATGT 635
Db 65 TCACAAAGCAAGAGGGAGAAAAACAAAGAAAGATCTCAAGTAGCCCATGT 15
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Qy 286 AGAAATCTAAGTTGTTGAACCTGTCCTCAAGGGTACTCGGCTAGGCTGTTGGTGGTTGC 345  
Db |||||  
Qy 365 AGAAATCTAAACCACTGAATTGGTCCAAAGGTTATTCAGCCAAAGTGTGGTGGTTTAC 306  
Db |||||  
Qy 346 CCCACCGGTCACCTGCGAGGACACACCAATACACAGTATGACGACCACTTACAG 405  
Db |||||  
Qy 305 CCCACCGGTCACCTGAGGACTCCACACAGTACCGGTTTGGCAGTACCCCTACAG 246  
Db |||||  
Qy 406 CACCATCGAAGTACATCCAGTACGACCCCATATACCTGCCATCGTAGTCCCTAGCG 465  
Db |||||  
Qy 245 CAGCATTTGAAGTTAATTTAGTACGGCCCATACAGTGCCTATTTAGTACCTCGTGGC 186  
Db |||||  
Qy 466 CATCAATGACCCATTTGGCCCGATCGAAACGTCGG-CACCCGCTTTTCGGGGTCGATG 524  
Db |||||  
Qy 185 CATTGATCACCAAGTTTGGCTCGATCGAGACCGCGCCACCGCTATGGTGTGACG 126  
Db |||||  
Qy 525 CCGCCCAAAACATGTATGACAGTGTGGCTACTCGATAGTGGCAGCATAGTGAAG 584  
Db |||||  
Qy 125 CCGCCCAAAACGTTGACGACAGTTGTTTCGGACCTCGATAGTGGCAGCATAGTAAAG 66  
Db |||||  
Qy 585 TCACAAAGCAAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGT 635  
Db |||||  
Qy 65 TCACAAAGCAAGGAGGAGAAACAAAGAGATCTCAAGTTGCCCATGT 15  
Db |||||

## RESULT 6

US-08-315-868A-5/c  
; Sequence 5, Application US/08315868A  
; Patent No. 5856151  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants with  
; TITLE OF INVENTION: Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10023  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette, 5.25 inch, 360 Kb storage  
; COMPUTER: IBM PC/XT/AT or compatibles  
; OPERATING SYSTEM: DOS  
; SOFTWARE: Word Perfect 5.1  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/315,868A  
; FILING DATE: 09-SEP-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 07/828,798  
; FILING DATE: 06-APR-1992  
; APPLICATION NUMBER: PCT/NL91/00089  
; FILING DATE: 31-05-91  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Mass, Clifford J.  
; REGISTRATION NUMBER: 30086  
; REFERENCE/DOCKET NUMBER: U-8622-6  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 708-1800  
; TELEFAX: (212) 246-8959  
; TELEX: 233288  
; INFORMATION FOR SEQ ID NO: 5:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 884

; TYPE: Nucleotide  
; STRANDEDNESS: Double  
; TOPOLOGY: Linear  
; MOLECULE TYPE: CDNA  
; ORIGINAL SOURCE:  
; ORGANISM: Nicotiana tabacum  
US-08-315-868A-5

Query Match 27.0%; Score 430.2; DB 2; Length 884;

Best Local Similarity 84.1%; Pred. No. 9.2e-96;  
Matches 497; Conservative 0; Mismatches 93; Indels 1; Gaps 1;

Qy 46 GGTATCTTTTGTGAAAAAATTTGAAAAAGACGTAGGACCAATGGAACCTTGGGTGCAAC 105  
Db |||||  
Qy 605 GGCATCTTTTGTGAAAAAATTTGAGAAAAATTTAGGACCAAGGCTCTTGTGTGCAAC 546  
Db |||||  
Qy 106 AATATTTGTTCTCTCCAAATGTGTACAAAGATTGTATCATCTCTCCGGGTACTTTAAGTT 165  
Db |||||  
Qy 545 AATATTTGTTCTCTCCAAATGTGTACAAAGATTGTATCATCTCTCCGGGAACCTTAAGTT 486  
Db |||||  
Qy 166 GACCAGGGCATTCACCATTTATATTTCGCGTGCATTGAATTTGTGTGGCATTTCTCTCCAC 225  
Db |||||  
Qy 485 CGCGGGACATTCGCGGTTATATTAGCCGTACAAATGATGATGCAATTTCTCTCCAC 426  
Db |||||  
Qy 226 TTGGAATTAGTCGGGGCGAAAGTTCATCGGTATATTAATTCATCAACTAAAGAAATGTCCC 285  
Db |||||  
Qy 425 TAGGGTTAGTCGGGGCGAAAGTTCATCGGAATGTTGAATTCATCAACTAAAGAAATGTCCC 366  
Db |||||  
Qy 286 AGAATCTAAGTTGTTGAACCTGTTCCAAAGGCTACTCGGCTAGGCTGTTGGTGGTTGC 345  
Db |||||  
Qy 365 AGAATCTAAACCACTGAATTTGGTCCAAAGCGTATTCAGCCAAAGTGTGTTGGTGGTTTAC 306  
Db |||||  
Qy 346 CCACCCGGTGCCTGACGACACACCAATCACCAGTCTATCAGCAACCTCTACCAG 405  
Db |||||  
Qy 305 CCACCCGGTGCCTGACGACCTCCACAGTCCCGGTTTGGACATACCTCCCTACCAG 246  
Db |||||  
Qy 406 CACCATCGAAGTTTACATCCAGTACGACCCCATATATCTGCTGATGTCCTCCCTAGCGC 465  
Db |||||  
Qy 245 CAGCATTTGAAGTTTACATTTAGTACGGCCCCCATACACGTCGCAATTTAGTACCTCTGTTGGC 186  
Db |||||  
Qy 466 CATCAATGACCCATTTGGCCCGGATCGAAACGTCGG-CACCCGCTTTTCGGGGTCGATG 524  
Db |||||  
Qy 185 CATTGATCACCAAGTTTGGCTCGATCGAGACCGCGCCACCGCTATGTTGGTGTGCGACG 126  
Db |||||  
Qy 525 CCGCCCAAAACGATGTATGAGCAGTTGTTGCTACTCGATAGTGGCAGCATAGTGAAG 584  
Db |||||  
Qy 125 CCGCCCAAAACGTTGATCGGACAGTTGTTTCGGACCTCGATAGTGGCAGCATAGTAAAG 66  
Db |||||  
Qy 585 TCACAAAGCAAGGAGGAGAAACAAAGAGATCTCAAGTAGCCCATGT 635  
Db |||||  
Qy 65 TCACAAAGCAAGGAGGAGAAACAAAGAGATCTCAAGTTGCCCATGT 15  
Db |||||

## RESULT 7

US-08-495-819B-5/c  
; Sequence 5, Application US/08495819B  
; Patent No. 6087161  
; GENERAL INFORMATION:  
; APPLICANT: Woloshuk, Charles P.  
; APPLICANT: Melchers, Leo S.  
; APPLICANT: Cornelissen, Bernardus J. C.  
; APPLICANT: Meulenhoff, Elisabeth J. S.  
; APPLICANT: Sela-Buurlage, Marianne B.  
; APPLICANT: Van Den Elzen, Petrus J. M.  
; TITLE OF INVENTION: Antifungal Preparations, Process for  
; TITLE OF INVENTION: Making Such Preparations, Process for Obtaining Plants  
; TITLE OF INVENTION: with Decreased Susceptibility to Fungi  
; NUMBER OF SEQUENCES: 7  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Ladas & Parry  
; STREET: 26 West 61st Street  
; CITY: New York  
; STATE: New York





QY 529 CCAACGATGATGGACAGTGTTCGCTACCTCGATAGTGGCAGCATAAGTGAAAGTCAC 588  
|||||  
Db 105 CCAACCGGTATGGACAGTGTTCGCTAATAGTGAACACGGCTGCATTGTTATAGTGAAA 46  
|||||

QY 589 AAAA 592  
|||  
Db 45 AAGA 42  
|||

## RESULT 9

US-08-181-271A-4/c  
; Sequence 4, Application US/08181271A  
; Patent No. 5614395  
; GENERAL INFORMATION:  
; APPLICANT: Ryals, John A.  
; APPLICANT: Alexander, Danny C.  
; APPLICANT: Beck, James J.  
; APPLICANT: Duesing, John H.  
; APPLICANT: Friedrich, Leslie B.  
; APPLICANT: Goodman, Robert M.  
; APPLICANT: Harms, Christian  
; APPLICANT: Meins, Jr., Frederick  
; APPLICANT: Montoya, Alice  
; APPLICANT: Moyer, Mary B.  
; APPLICANT: Neuhaus, Jean-Marc  
; APPLICANT: Payne, George B.  
; APPLICANT: Sperison, Christoph  
; APPLICANT: Stinson, Jeffrey R.  
; APPLICANT: Uknes, Scott J.  
; APPLICANT: Ward, Eric R.  
; APPLICANT: Williams, Shericca C.  
; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
; NUMBER OF SEQUENCES: 106  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: CIBA-GEIGY Corporation  
; STREET: 7 Skyline Drive  
; CITY: Hawthorne  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10532  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/181,271A  
; FILING DATE: 13-JAN-94  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/093,301  
; FILING DATE: 16-JUL-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/937,197  
; FILING DATE: 6-NOV-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/678,378  
; FILING DATE: 1-APR-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/305,566  
; FILING DATE: 6-FEB-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/165,667  
; FILING DATE: 8-MAR-1988  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/042,847  
; FILING DATE: 6-APR-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/632,441  
; FILING DATE: 21-DEC-1990  
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/425,504  
; FILING DATE: 20-OCT 1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/848,506  
; FILING DATE: 6-MAR-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/768,122  
; FILING DATE: 27-SEP-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/580,431  
; FILING DATE: 7-SEP-1990  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/368,672  
; FILING DATE: 20-JUN-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/329,018  
; FILING DATE: 24-MAR-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/045,957  
; FILING DATE: 12-APR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Elmer, James Scott  
; REGISTRATION NUMBER: 36,129  
; REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (919)541-8614  
; TELEFAX: (919)541-8689  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 900 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: CDNA  
; US-08-181-271A-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 2.7e-28;  
Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;  
QY 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGAACGTAGGACCACAT-----GGACCTTGGG 99  
|||  
Db 607 GGCATCTTTCTTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548  
|||  
QY 100 TGCAACAATATTGTGTCCTCCAAATGTGTACAAGGATTTGTACATCTCTCCGGGTACTT 159  
|||  
Db 547 TACAACAATATTCAATGGTTTTTATCAGTACATGATGGTTGTTCATCCACCTTGTGTTT 488  
|||  
QY 160 TAAAGTTGACCAGGGCATTCACCAATTTATATTTGCGTGCAATTTGAATTTGTGGCATTTCC 219  
|||  
Db 487 TCAACTGTCTGGGCATTGTCGTTAATAGTGTCTGTGCATCTGAGATTACGACAT---- 432  
|||  
QY 220 CTCCACTTGGATTAGTCGGGGCGAAGTCAATCGGTATATTAAATCCATCAACTAAAGNAA 279  
|||  
Db 431 -----CCTCCATTGGTCGGGCTGAAATTCATGGGGATGTTAAATCCATCAACAAGAGAGA 377  
|||  
QY 280 TGTCCCAAGAAATCTAAGTTGTTGAACGTGCCAAGGGGTACTCGGTAGGGTGTGTTGTTG 339  
|||  
Db 376 TGTCGACAAAGTC---CTGATTGGGTTGATTAAGTGCAAAATTCAGCTAAAGTTAGTGTG 320  
|||  
QY 340 GTTTGCCCCACCGGTGCACTGCAGGACACACCAATCACCAGTCAATCAGCAACCTC 399  
|||  
Db 319 CTTTTCATAGCCTTGACACTTAACATCCCGTTACAGTCTCCAGTCTCACAATTAACCTC 260  
|||  
QY 400 TACGAGCAATCGAAGTTTACATCCAGTACACCCCATATACCTGCGCATCGTAGTGCCCC 459  
|||  
Db 259 GGCCACTGCCATCGAAGTTGCAATTTGTTGACCCCAATTCGAGCCCTGAGCTGTTCCTG 200  
|||  
QY 460 TAGCGCATCAATGACCCCATTTGGCCCGCATCGAAACGTTCGACACCGCTTCGGGGT 519  
|||  
Db 199 GGTTCACATTAATGCTCCAGATTTGGCTGAGTCGAGCCGCTCCCTCCACT--GGAGA 142  
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QY 520 CGATGCCGCCCAACAGATGTATGGACAGTTGTTGCGTACCTCGATAGTGGCAGCATAGT 579  
|||

Db 141 GCGCGGCGCCAGCTGTAGTGCATTTGTTGACATGTTCAAAGTGGCAGCATGAGT 82

Qy 580 GAAAGTCACAAA 591

Db 81 AACAGCTACAAA 70

## RESULT 10

US-08-449-315-4/c

; Sequence 4, Application US/08449315

; Patent No. 5650505

; GENERAL INFORMATION:

; APPLICANT: Ryals, John A.

; APPLICANT: Alexander, Danny C.

; APPLICANT: Beck, James J.

; APPLICANT: Duesing, John H.

; APPLICANT: Friedrich, Leslie B.

; APPLICANT: Goodman, Robert M.

; APPLICANT: Harms, Christian

; APPLICANT: Meins, Jr., Frederick

; APPLICANT: Montoya, Alice

; APPLICANT: Moyer, Mary B.

; APPLICANT: Neuhaus, Jean-Marc

; APPLICANT: Payne, George B.

; APPLICANT: Sperison, Christoph

; APPLICANT: Stinson, Jeffrey R.

; APPLICANT: Uknes, Scott J.

; APPLICANT: Ward, Eric R.

; APPLICANT: Williams, Shericca C.

; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC

; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF

; NUMBER OF SEQUENCES: 106

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: CIBA-GEIGY Corporation

; STREET: 7 Skyline Drive

; CITY: Hawthorne

; STATE: New York

; COUNTRY: USA

; ZIP: 10532

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/449,315

; FILING DATE: 24-MAY-1995

; CLASSIFICATION: 800

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/181,271

; FILING DATE: 13-JAN-94

; APPLICATION NUMBER: US 08/093,301

; FILING DATE: 16-JUL-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/937,197

; FILING DATE: 6-NOV-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/678,378

; FILING DATE: 1-APR-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/305,566

; FILING DATE: 6-FEB-1989

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/165,667

; FILING DATE: 8-MAR-1988

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/042,847

; FILING DATE: 6-APR-1993

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/632,441

; FILING DATE: 21-DEC-1990

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/425,504

; FILING DATE: 20-OCT 1989

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/848,506

; FILING DATE: 6-MAR-1992

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/768,122

; FILING DATE: 27-SEP-1991

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/580,431

; FILING DATE: 7-SEP-1990

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/368,672

; FILING DATE: 20-JUN-1989

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/329,018

; FILING DATE: 24-MAR-1989

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/045,957

; FILING DATE: 12-APR-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: Elmer, James Scott

; REGISTRATION NUMBER: 36,129

; REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (919)541-8614

; TELEFAX: (919)541-8689

; INFORMATION FOR SEQ ID NO: 4:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 900 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

US-08-449-315-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;

Best Local Similarity 60.5%; Pred. No. 2.7e-26;

Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;

Qy 46 GGTATCTTTGTTTGAAGAAATTTGAAAAGAACGTAGGACACACAT-----GGACCTTTGGG 99

Db 607 GGCATCTTTCCTTAAAGAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548

Qy 100 TGCACCAATATGTTGTCCTCAAAATGTTGACAAAGATTGTTACATCTCGGGTACTT 159

Db 547 TACAACAATATTCATTTGTTTATCACAGTACATGGGTTGTTACATCCACCTTGTGTTT 488

Qy 160 TAAGTTGACGAGGGCATTCACCATTTATTTTCCGTCGATTAATTGTTGGCATTTCC 219

Db 487 TCAACTGTGCTGGGCATTTTCGTTAATAGGTGCTGTGCATCTGAGATTACGACAT---- 432

Qy 220 CTCCACTTGGATTAGTCGGGGCGAAAGTCATCGGTATATAATTAATCCATCAACTAAAGAAA 279

Db 431 -----CTCCATTTGTCGGGCTGAATTCATGGGATGTTAAATCCATCAACAGAGAGA 377

Qy 280 TGTCCAGAAATCTAAGTTGTTGAATGTTGTCAGAGCGTACTCGGCTAGGTGTTTGGTG 339

Db 376 TGTGACAAAGTC---CTGATTGGGTTGATTAAGTGCAAAATTCAGCTAAAGTGTAGGTG 320

Qy 340 GTTTGCCCCCGTCGTCAGGACACACACATCAACCATCCAGTCATGACGACACCTC 399

Db 319 CTTTTCATAGCCTTGACACTCTAACATCCCGTTACAGTCTCCAGTCTCACAATTAACCTC 260

Qy 400 TACCAGCACCATCGAAGTTACATCCAGTACCACCCCATATACCTGCCATCGTAGTGCCCC 459

Db 259 GGCCACTGCCATCGAAGTTGCAATTTGGTTTCACCCCAATCGAGCGCTGGACTGTTCTG 200

Qy 460 TAGGGCATCAATGACCCACATTTTGGCCCCGATCGAAACGTCGGGACCCGCTTGGGGT 519

Db 199 GGTTCACATTAATGCTCCAGATTGGGCTGAGTGGAGCGCGCTGCCTCCACT--GGAGA 142

Qy 520 CGATGCCGCCCAACGATGTATGGACAGTTGTTGGTACCTCGATAGTGGCAGCATAGT 579

Db 141 GGCGCGCCGAGACTGTAGTGCATTTGTTGACAATGTCAAAGTGGCAGCATGAGT 82  
Qy 580 GAAAGTCACAAA 591  
Db 81 AACAGCTACAAA 70

## RESULT 11

US-08-444-803-4/c  
; Sequence 4, Application US/08444803  
; Patent No. 5654414  
; GENERAL INFORMATION:  
; APPLICANT: Ryals, John A.  
; APPLICANT: Alexander, Danny C.  
; APPLICANT: Beck, James J.  
; APPLICANT: Duesing, John H.  
; APPLICANT: Friedrich, Leslie B.  
; APPLICANT: Goodman, Robert M.  
; APPLICANT: Harms, Christian  
; APPLICANT: Meins, Jr., Frederick  
; APPLICANT: Montoya, Alice  
; APPLICANT: Moyer, Mary B.  
; APPLICANT: Neuhaus, Jean-Marc  
; APPLICANT: Payne, George B.  
; APPLICANT: Sperison, Christoph  
; APPLICANT: Stinson, Jeffrey R.  
; APPLICANT: Uknes, Scott J.  
; APPLICANT: Ward, Eric R.  
; APPLICANT: Williams, Shericea C.  
; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
; NUMBER OF SEQUENCES: 106  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: CIBA-GEIGY Corporation  
; STREET: 7 Skyline Drive  
; CITY: Hawthorne  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10532  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: -IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA: US/08/444,803  
; FILING DATE: 19-MAY-1995  
; CLASSIFICATION: 536  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/181,271  
; FILING DATE: 13-JAN-94  
; APPLICATION NUMBER: US 08/093,301  
; FILING DATE: 16-JUL-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/937,197  
; FILING DATE: 6-NOV-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/678,378  
; FILING DATE: 1-APR-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/305,566  
; FILING DATE: 6-FEB-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/165,667  
; FILING DATE: 8-MAR-1988  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/042,847  
; FILING DATE: 6-APR-1993  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/632,441  
; FILING DATE: 21-DEC-1990  
; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/425,504  
; FILING DATE: 20-OCT 1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/848,506  
; FILING DATE: 6-MAR-1992  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/768,122  
; FILING DATE: 27-SEP-1991  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/580,431  
; FILING DATE: 7-SEP-1990  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/368,672  
; FILING DATE: 20-JUN-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/329,018  
; FILING DATE: 24-MAR-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/045,957  
; FILING DATE: 12-APR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Elmer, James Scott  
; REGISTRATION NUMBER: 36,129  
; REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (919)541-8614  
; TELEFAX: (919)541-8689  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 900 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; US-08-444-803-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 2.7e-28;  
Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;

Qy 46 GGTATCTTTGTTGAAAAAATTCGAAAAAGAACGTAGGACACACAT-----GGACCTTGGG 99  
Db 607 GGCATCTTTCTTTAAAAAATCTCGACAAATCAGTAGGCCACACATGATCCAGGCCCAATTG 548  
Qy 100 TGCAACAATATTGTTGTCCTCCAAATGTGTGTAAGGATTGTACATCTCCGGGTACTT 159  
Db 547 TACAACAATATTCAATGGTTTTTATCACAGTACATGGTTGTACATCCACCTTGTGTTT 488  
Qy 160 TAAAGTTGACCAAGGCAATCCACATTTATATTGCGGTGCAATTGAATTTGTGTGGCAATTCC 219  
Db 487 TCAACTGTGCTGGGCATTTGCTTTAATAGGTGCTGTGCATCTGAGATTAGACAT---- 432  
Qy 220 CTCACATTGATTAGTCGGGGGCAAGTATCGGTATATTAAATCCATCACTAAAGAAA 279  
Db 431 -----CCTCCATTGGTCGGGCTGAAATTCATGGGGATGTTAAATCCATCAACAAGAGAGA 377  
Qy 280 TGTCCCAAGAAATCTAAGTTGTTGAACTGTCGAAGGGGTACTCGGCTAGGGTGTGTTGGTG 339  
Db 376 TGTCGACAAAGTC---CTGATTGGTTGATTAGTGCAAAATTCAGCTAAAGTGTAGGTG 320  
Qy 340 GTTTGCCCCACCCGGTGCACCTGCAGGAGACACACCAATCAACAGTCAATGACGAAACCTC 399  
Db 319 CTTTTCATAGCCTTGACACTCTAACATCCCGTTACAGTCTCCAGTCTCACAATTAACCTC 260  
Qy 400 TACGAGCAACATCGAAGTTACATCCAGTACGACCCCATATACCTGCCATCGTAGTGCCCC 459  
Db 259 GGCCACTGCCCATCGAAGTTGCAATTTGGTTCCGACCCCAATTCGAGCCCTGACTGTTCTGT 200  
Qy 460 TAGCGCATCAATGACCCCAATTTGGCCCGCGATTCGAAACGTCGGCAGCCGCTTCGGGGT 519  
Db 199 GGTTCACATTAATGCTCCAAGATTGGCCCTGAGTCGAGCCGCTGCTCCACCT--GGAGA 142  
Qy 520 CGATGCCGCCCAAAACGATGTATGGACAGATTGTTGCGTACCTCGATAGTGGCAGCATAGT 579

Db 141 GCGCGGCGCCAGCTGTGTAGTGTGCAATTTGTTGCAATGTCAAAAGTGCGCAGCATGAGT 82  
QY 580 GAAAGTCACAAA 591  
Db 81 AACAGCTACAAA 70

RESULT 12  
US-08-449-043-4/c  
Sequence 4, Application US/08449043  
Patent No. 5689044  
GENERAL INFORMATION:  
APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Spierison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uxnes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
NUMBER OF SEQUENCES: 106  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/449,043  
FILING DATE: 24-MAY-1995  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/181,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/678,378  
FILING DATE: 1-APR-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
US-08-449-043-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 2.7e-28;  
Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;  
QY 46 GGTATCTTTTGTGAAATAATGGAAAAAGACGTAGGACCCACAT-----GGACCTTGGG 99  
Db 607 GGCATCTTTCTTAAATAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548  
QY 100 TGCACAAATATTTGTCCTCCAAATGTGTGACAGGATTTGTTACATCTCTCGGGTACTT 159  
Db 547 TACAACAATATTCATTTGTTTTTATCAGATACATGGGTTGTTTACATCCACCTTGTGTT 488  
QY 160 TAAGTTGACAGGCGCATTCACCATTTATTTTCCGTGTCATTTGAATTTGTGGCATTTCC 219  
Db 487 TCAACTGTGCGGCATTTGTTTAAAGTGTGCTGTGCATCTGAGATTACGACAT---- 432  
QY 220 CTCCACTTTGGATTAGTCGGGGCGAAAGTCATCGGTATATTAATTAATCCATCAACTAAAGAAA 279  
Db 431 -----CCTCCATTTGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGAGA 377  
QY 280 TGTCCAGAAATCTAAGTTGTTGAACTGTGTCCAGGCGCTACTCGGCTAGGGTGTGTTG 339  
Db 376 TGTCCAGAAAGTC---CTGATTGGGTTGATTAAAGTGCAAAATTCAGCTAAAGTTGTTAGGTG 320  
QY 340 GTTTGCCCCCAGCGGTGCACCTGCGAGGACACACCAATCACCAGTCATGACGACGACCTC 399  
Db 319 CTTTTCATAGCCTTGACACTTAACTCCCGTTTACGTCTCCAGTCTCACAATTAACCTC 260  
QY 400 TACCAGCACCATCGAAGTTTACATCCAGTACGACCCCATATATACCTGCCATCTAGTAGCCCC 459  
Db 259 GGCCTACTGCCATCGAAGTTGCAATTTGTTTGCACCCCAATCGAGCTGGAGCTGTTCTG 200  
QY 460 TAGGGGATCAATGACCCACATTTGGCCCCCATCGAAACGTCCGGCACCCGCTTCGGGGT 519  
Db 199 GGTTCACATTAATGCTCCAGATTTGGCTGAGTCGAGCGCGCTGCTCCACCT--GGAGA 142  
QY 520 CGATGCCGCCCAACAGATGTATGGACAGATTTGTTGCTACCTCGATAGTAGTGGCAGCATAGT 579

Db 141 GGCGGCGCCAGACTGTAGTGGCATTTGTTGCAATGTCAAAGTGGCAGCATGAGT 82  
Qy 580 GAAAGTCAAAA 591  
Db 81 AACAGCTACAAA 70

## RESULT 13

US-08-456-265A-4/c  
; Sequence 4, Application US/08456265A  
; Patent No. 5767369  
; GENERAL INFORMATION:  
; APPLICANT: Alexander, Danny C.  
; APPLICANT: Ryals, John A.  
; APPLICANT: Goodman, Robert M.  
; APPLICANT: Stinson, Jeffrey R.  
; TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
; TITLE OF INVENTION: DNA SEQUENCES AND USES THEREOF  
; NUMBER OF SEQUENCES: 111  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: CIBA-GEIGY Corporation  
; STREET: 520 White Plains Road, P.O. Box 2005  
; CITY: Tarrytown  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10591

COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/456,265A  
; FILING DATE: 31-MAY-95  
; CLASSIFICATION: 435

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/181,271  
; FILING DATE: 13-JAN-1994

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/093,301  
; FILING DATE: 16-JUL-1993

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/937,197  
; FILING DATE: 6-NOV-1992

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/678,378  
; FILING DATE: 1-APR-1991

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/305,566  
; FILING DATE: 6-FEB-1989

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/165,667  
; FILING DATE: 8-MAR-1988

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/042,847  
; FILING DATE: 6-APR-1993

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/632,441  
; FILING DATE: 21-DEC-1990

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/425,504  
; FILING DATE: 20-OCT 1989

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/848,506  
; FILING DATE: 6-MAR-1992

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/768,122  
; FILING DATE: 27-SEP-1991

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/580,431  
; FILING DATE: 7-SEP-1990

PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/580,431  
; FILING DATE: 7-SEP-1990

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 07/368,672  
; FILING DATE: 20-JUN-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/329,018  
; FILING DATE: 24-MAR-1989  
; PRIOR APPLICATION DATA: US 08/045,957  
; APPLICATION NUMBER: US 08/045,957  
; FILING DATE: 12-APR-1993  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Meigs, J. Timothy  
; REGISTRATION NUMBER: 38,241  
; REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727/DIV10  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (919)541-8587  
; TELEFAX: (919)541-8689  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 900 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cdna  
US-08-456-265A-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 2.7e-28;  
Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;

Qy 46 GGTATCTTTGTTGAAAAAATTTGAAAAAGAACTAGACACCAT-----GGACCTTGGG 99  
Db 607 GGCATCTTTCTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCATTGTG 548  
Qy 100 TGCAACAATAATTTGTTGCTCCCAATGTGTACAAGGATTTTACATCTCTCCGGGTACTT 159  
Db 547 TACAACAATAATTTGTTGCTTTTATACAGTACATGGTTGTTACATCCACCTTGTGTTT 488  
Qy 160 TAAAGTTGACAGGGCATTTACATTTATATTGTCGGTGCATTTGAATTTGTTGGCATTTCC 219  
Db 487 TCAACTGTGTGGGCATTTGTTGTTAATAGGTGCTGTGCATCTGAGATTACGACAT---- 432  
Qy 220 CTCCACTTGGATTAGTTCGGGGCGAAGTCAATCGGTATATTAAATCCATCAACTAAAGAA 279  
Db 431 -----CCTCCATTTGGTGGGCTGAAATTCATGGGGATGTTAAATCCATCAACAAGAGA 377  
Qy 280 TGTCCACAGAAATCTAAGTTGTTGAACTGTGTCGAAGGCTACTCGGCTAGGTTGTTGGTG 339  
Db 376 TGTGACAAAGTC---CTGATTGGTTGATTAAAGTCAAAATTCAGCTAAAGTTGTAGTG 320  
Qy 340 GTTTGCCCCACCGGTGCACTGCAGGACACCAACAATCACCAGTCAATGCACGAACCTC 399  
Db 319 CTTTTCATAGCCTTGACACTCTAAACATCCCGTTACAGTCTCCAGTCTCAATATTACCTC 260  
Qy 400 TACGAGCAATCGAAGTTACATCCAGTACAGCCCCATATACCTGCCATCGTAGTGCCCC 459  
Db 259 GGCCACTGCCATCGAAGTTGCAATTTGGTTCCAGCCCCAAATTCGAGCCCTGGAGCTTCTG 200  
Qy 460 TAGCGCATCAATGACCCCAATTTGGCCCGCATCGAAACGTTCGACACCGCTTCGGGGT 519  
Db 199 GGTTCATTTAATGTTCCAAAGATTGGCTGAGTGGAGCCGCCCTGCCTCCACT--GGAGA 142  
Qy 520 CGATGCGGCCCAACAGATGTATGGACAGTTGTTGCGTACCTCGATAGTGGCAGCATAGT 579  
Db 141 GGCCGGGGCCAGACTGTGTAGTGCAATTTGTTGCAATGTTGTTGCAATGTTCAAAAGTGGCAGCATGAGT 82  
Qy 580 GAAAGTCAAAA 591  
Db 81 AACAGCTACAAA 70

## RESULT 14

US-08-456-416-4/c  
; Sequence 4, Application US/08455416  
; Patent No. 5777200

GENERAL INFORMATION:  
APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericca C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
DNA SEQUENCES AND USES THEREOF  
NUMBER OF SEQUENCES: 106  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,416  
FILING DATE: 31-MAY-1995  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/181,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/678,378  
FILING DATE: 1-APR-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: CDNA  
US-08-455-416-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 2.7e-28;  
Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;

QY 46 GGTATCTTTTGTGAAAAAATGGAAAAAGACGTAGGACCCACAT-----GGACCTTGGG 99  
DB 607 GGCATCTTTCTTAAAAAATCTCGACAATCAGTAGGCCACATGATCCAGGCCCATTTG 548  
QY 100 TGCACAATATTTGTTCTCCTCAAAATGTTGTTACAGGATTTGTTACATCTCTCGGGTACTT 159  
DB 547 TACAACAATATTTGTTCTCCTCAAAATGTTGTTACAGGATTTGTTACATCTCTCGGGTACTT 488  
QY 160 TAAGTTGACACAGGCGCATTCACCATTTATTTTGGCGTCATTGATTTGTTGGCATTTCC 219  
DB 487 TCAACTGTGCTGGGCAATTTGTTTAAATAGTGTCTGTGCATCTGAGATTACGACAT---- 432  
QY 220 CTCCACTTTGGATTAGTCGGGGCGAAAGTCATCGGTATATTAATCCATCAACTAAAGAAA 279  
DB 431 -----CCTCCATTTGTCGGGCTGAATTCATGGGGATGTTAAATCCATCAACAAGAGA 377  
QY 280 TGTCCAGAAATCTAAGTTGTTGAACTGGTCCAGGCGTACTCGGCTAGGGTGTGTTGGTG 339  
DB 376 TGTCCAGAAAGTC---CTGATTGGGTTGATTAAAGTGCAAAATTCAGCTAAAGTGTAGGTG 320  
QY 340 GTTTGCCCCACCGGTGCATCTGACAGGACACACCAATCACCAGTCATGACGAACTC 399  
DB 319 CTTTTCATAGCCTTGACACTTAACATCCCGTTACAGTCTCCAGTCTCACAATTAACCTC 260  
QY 400 TACCAGCACCATCGAAGTTTACATCCAGTACGACCCCATATATCTGTCATCGTAGTCCCC 459  
DB 259 GGCCACTGCCATCGAAGTTGCAATTTGGTTCCACCCCAATCGAGCCCTGGACTGTTCTCG 200  
QY 460 TAGGGGATCAATGACCCACATTTTGGCCCCGATCGAAACGTGCGGACCCGCTTCGGGGT 519  
DB 199 GGTTCACATTAATGCTCCAGATTGGCTGAGTGGAGCCGCTGCTCCACCT--GGAGA 142  
QY 520 CGATCGCCGCCCAACGATGATGGACAGTTCTGCTGTTACCTCGATAGTGGAGCATAAGT 579  
DB 141 GGCCGCCGCCCAACGATGATGGACAGTTCTGCTGTTACCTCGATAGTGGAGCATAAGT 82  
QY 580 GAAAGTCACAAA 591  
DB 81 AACAGCTACAAA 70

RESULT 15  
US-08-455-244-4/c  
; Sequence 4, Application US/08455244  
; Patent No. 5789214

GENERAL INFORMATION:  
APPLICANT: Ryals, John A.  
APPLICANT: Alexander, Danny C.  
APPLICANT: Beck, James J.  
APPLICANT: Duesing, John H.  
APPLICANT: Friedrich, Leslie B.  
APPLICANT: Goodman, Robert M.  
APPLICANT: Harms, Christian  
APPLICANT: Meins, Jr., Frederick  
APPLICANT: Montoya, Alice  
APPLICANT: Moyer, Mary B.  
APPLICANT: Neuhaus, Jean-Marc  
APPLICANT: Payne, George B.  
APPLICANT: Sperison, Christoph  
APPLICANT: Stinson, Jeffrey R.  
APPLICANT: Uknes, Scott J.  
APPLICANT: Ward, Eric R.  
APPLICANT: Williams, Shericea C.  
TITLE OF INVENTION: CHEMICALLY REGULATABLE AND ANTI-PATHOGENIC  
NUMBER OF SEQUENCES: 106  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: CIBA-GEIGY Corporation  
STREET: 7 Skyline Drive  
CITY: Hawthorne  
STATE: New York  
COUNTRY: USA  
ZIP: 10532  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/455,244  
FILING DATE: 31-MAY-1995  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/181,271  
FILING DATE: 13-JAN-94  
APPLICATION NUMBER: US 08/093,301  
FILING DATE: 16-JUL-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/937,197  
FILING DATE: 6-NOV-1992  
APPLICATION NUMBER: US 07/578,378  
FILING DATE: 1-APR-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/305,566  
FILING DATE: 6-FEB-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/165,667  
FILING DATE: 8-MAR-1988  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/042,847  
FILING DATE: 6-APR-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/632,441  
FILING DATE: 21-DEC-1990  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/425,504  
FILING DATE: 20-OCT 1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/848,506  
FILING DATE: 6-MAR-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/768,122  
FILING DATE: 27-SEP-1991  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/580,431  
FILING DATE: 7-SEP-1990  
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/368,672  
FILING DATE: 20-JUN-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/329,018  
FILING DATE: 24-MAR-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/045,957  
FILING DATE: 12-APR-1993  
ATTORNEY/AGENT INFORMATION:  
NAME: Elmer, James Scott  
REGISTRATION NUMBER: 36,129  
REFERENCE/DOCKET NUMBER: S-19825/P1/CGC 1727  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (919)541-8614  
TELEFAX: (919)541-8689  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 900 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
US-08-455-244-4

Query Match 9.7%; Score 155.2; DB 1; Length 900;  
Best Local Similarity 60.5%; Pred. No. 2.7e-28;  
Matches 334; Conservative 0; Mismatches 198; Indels 20; Gaps 4;

QY 46 GGTATCTTTGTTGAAAAAATTCGAAAAAGAACGTAGGACACCAT-----GGACCTTGGG 99  
DB 607 GGCATCTTTCTTTAAAAAATCTCGACAAATCAGTAGGCCACATGATCCAGGCCCATTTG 548  
QY 100 TGCAACAAATATTGTTGCTCCAAATGTGTGTACAAAGATTGTTACATCTCCCGGTACTT 159  
DB 547 TACACAAATATTCAATGGTTTTTATCACAGTACATGGTTGTTTACATCCACCTTGTGTT 488  
QY 160 TAAAGTTGACAGGGCAATTCACATTTTATATTTCGCGTCATTTGAATTTGTGGCATTTCC 219  
DB 487 TCAACTGTGCTGGGCATTTGTTGTTAATAGTGTGTCATCTGAGATTACGACAT---- 432  
QY 220 CTCACATTGATTTAGTCGGGGCGAAAGTATCGGTATATTAAATCCATCAACTAAAGAAA 279  
DB 431 -----CCTCCATTGGTGGGCTGAATTTCCATGGGGATGTTAAATCCATCAACAGAGAGA 377  
QY 280 TGTCCCGAGAAATCTAAAGTTGTTGAACTGGTCCAGGGCTACTCGGCTAGGTTGTTGGTG 339  
DB 376 TGTGACAAAGTC---CTGATTGGTTGATTAAGTGCAAATTCAGCTAAAGTTGTTAGTG 320  
QY 340 GTTTGCCCCACCGGTGCACTGCAGGACACACACCAATCACCAGTCATGCAGCAACCTC 399  
DB 319 CTTTTCATAGCCTTGACACTCTAAACATCCGTTACAGTCTCCAGTCTCACAATTACCTC 260  
QY 400 TACAGCACCATCGAAGTTTACATCCAGTAGACGCCCATATACCTGCCATCGTAGTGCCCC 459  
DB 259 GGCCACTGCCCATCGAAGTTTGCATTTGGTTCCAGCCCCAAATCGAGCCTCGGACTGTCCTG 200  
QY 460 TAGCGCATCAATGACCCACATTTGGCCCCGATCGAAACCTCGGCACCCCGCTTCGGGGT 519  
DB 199 GGTTCACATTAATGCTCCAAAGATTGGCCTGAGTCGAGCCGCCCTGCCCTCCACCT--GGAGA 142  
QY 520 CGATGCCGCCCAACGATGTATGGACAGATTGTTGGTTCGCTACCTCGATAGTGGCAGCATAGT 579  
DB 141 GGCCGGGGCCGACACTGTGTAGGTGCATTTGTTGACAAATGTCAAAGTGGCAGCATGAGT 82  
QY 580 GAAAGTCACAAA 591  
DB 81 AACAGCTACAAA 70

Search completed: June 17, 2005, 19:51:52  
Job time : 265.504 secs



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